

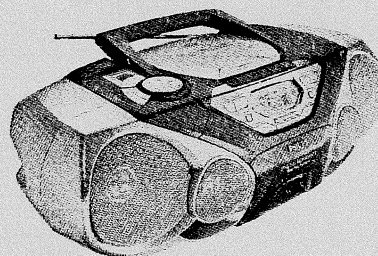
CD Stereo Radio Recorder

Service
Service
Service

AZ1570

AZ1575

all versions



Service Manual

COMPACT
disc
DIGITAL AUDIO

TABLE OF CONTENTS

	chapter		chapter
Handling chip components and safety	1 - 1	FEATURE BOARD	
Technical Specification & Service Tools	2 - 1	circuit diagram	10 - 1
Service Measurement	2 - 2	layout diagram	10 - 2
Connections & Controls	3 - 1	POWER BOARD	
Instructions for use	3 - 2 to 3 - 6	circuit & layout diagram	11 - 1
Disassembly Diagram	4 - 1	KEYBOARD	
CD Service Test Program	4 - 2 to 4 - 3	circuit & layout diagram	12 - 1
Block Diagram	5 - 1	RECORDER BOARD	
Wiring Diagram	6 - 1	circuit diagram	13 - 1
AF BOARD		layout diagram	13 - 2
circuit diagram	7 - 1	CD MODULE	
layout diagram	7 - 2	layout diagram	14 - 1
TUNER BOARD		circuit diagram	14 - 2
circuit diagram	8 - 1	EXPLODED VIEWS DIAGRAM	
layout diagram	8 - 2	cabinet	15 - 1, 15 - 4
CONTROL BOARD		tape deck	15 - 2 to 15 - 3
circuit diagram	9 - 1	Mechanical partslist	15 - 2 to 15 - 3
layout diagram	9 - 2	Electrical partslist	16 - 1 to 16 - 6

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

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CLASS 1
LASER PRODUCT

Published by SS 0038 Service Audio

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Subject to modification

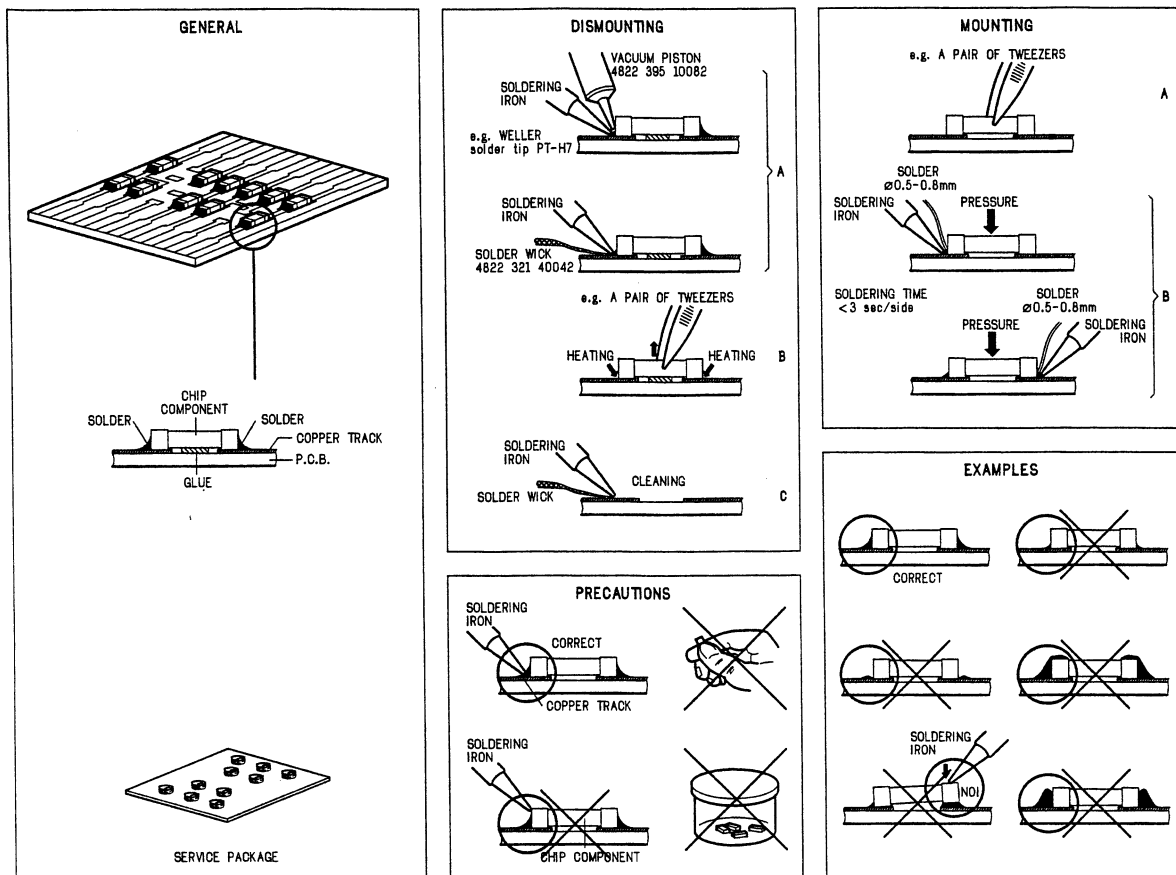
GB 3140 785 22500

PCS 104 626



PHILIPS

HANDLING CHIP COMPONENTS



© WARNING

All ICs and many other semiconductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically. When repairing, make sure that you are connected with the same potential as the mass of the set via a wristband with resistance. Keep components and tools at this potential.

f ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD). Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation. Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfilez le braceleterti d'une résistance de sécurité. Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

©

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used. Safety components are marked by the symbol ▲

f

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées. Les composants de sécurité sont marqués ▲

©

DANGER: Invisible laser radiation when open. AVOID DIRECT EXPOSURE TO BEAM.

s Varning !

Osynlig laserstrålning ved åbning når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

Advarsel !

Usynlig laserstrålning ved åbning når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

ESD



d WARNUNG

Alle ICs und viele andere Halbleiter sind empfindlich gegenüber elektrostatischen Entladungen (ESD). Unsorgfältige Behandlung im Reparaturfall kann die Lebensdauer drastisch reduzieren. Sorgen Sie dafür, daß Sie im Reparaturfall über ein Pulsarmband mit Widerstand mit dem Massepotential des Gerätes verbunden sind. Halten Sie Bauteile und Hilfsmittel ebenfalls auf diesem Potential.

SAFETY



d

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Gerätes darf nicht verändert werden. Für Reparaturen sind Originalersatzteile zu verwenden. Sicherheitsbauteile sind durch das Symbol ▲ markiert.

**CLASS 1
LASER PRODUCT**

B Varoitus !

Avatussa laitteessa ja suojalukituksen ohitettaessa olet alttiina näkymättömälle laserisäteilylle. Älä katso säteeseen !

⚡ WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD). Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen. Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat. Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

i AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD). La loro longevità potrebbe essere fortemente ridotta in caso di non osservazione della più grande cauzione alla loro manipolazione. Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un bracciale a resistenza. Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

⚡

Veiligheidsbepalingen vereisen, dat het apparaat in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast. De Veiligheidsonderdelen zijn aangeduid met het symbool ▲

i

Le norme di sicurezza estigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambio identici a quelli specificati. Componenti di sicurezza sono marcati con ▲

©

After servicing and before returning the set to customer perform a leakage current measurement test from all exposed metal parts to earth ground, to assure no shock hazard exists. The leakage current must not exceed 0.5mA.

f

Pour votre sécurité, ces documents doivent être utilisés par des spécialistes agréés, seuls habilités à réparer votre appareil en panne.

TECHNICAL SPECIFICATIONS

GENERAL

Mains voltage	-/00/14 : 230 V
	-/01/11/16 : 120 / 230 V
	-/05/10 : 240 V
	-/13 : 220V
	-/17 : 120 V
Mains frequency	-/00/05/10/14 : 50 Hz
	-/01/11/16 : 50 / 60 Hz
	-/13/17 : 60 Hz
Battery	mains : 9 V (R20 x 6)
	remote : 3 V (R6 x 2)
Power consumption	: 35 W
Dimension (W x H x D)	: 505 x 163 x 245 mm
Weight	: 4.5 Kg

AMPLIFIER

Output power	mains : 2 x 1.6 W
	battery : 2 x 1.6 W
Speaker impedance	: 2 x 4 ohm
	: 2 x 8 ohm
Frequency response	: 100 Hz - 10 kHz (±3dB)

TUNER - FM SECTION

Tuning range	: 87.5 - 108 MHz
	-/14 : 65.81 MHz - 74 MHz
IF frequency	: 10.7 MHz ± 0.03 MHz
Sensitivity	: 18 dB at 26dB S/N
Selectivity	: 55 dB at 300kHz
IF rejection	: 90 dB
Image rejection	: 40 dB

TUNER - AM SECTION

Tuning range	MW : 531 - 1602 kHz
	-/17 : 530 - 1700 kHz
	LW : 153 - 279 kHz
Sensitivity	MW : 2000 µV/m at 26dB S/N
	LW : 4500 µV/m at 26dB S/N
Selectivity	MW : 23 dB
	LW : 29 dB
IF rejection	MW : 60 dB
	LW : 60 dB
Image rejection	MW : 37 dB
	LW : 38 dB

AUDIO CASSETTE RECORDER

Number of tracks	: 1 stereo
Tape speed	: 4.76 cm/sec ± 3%
Wow & flutter	: < 0.48 JIS UWTD
Fast wind/rewind C60	: < 110 sec.
Frequency response	P/B : 125 - 6300 Hz
S/N ratio	: 45 dB

COMPACT DISC

Frequency response	: 100 Hz - 10 kHz
S/N ratio	: 60 dB
Channel difference	1 kHz : 2 dB
Channel crosstalk	1 kHz : 40 dB
Laser wavelength	: 780 ± 20 nm
Laser light power	: < 0.3 mW

SERVICE TOOLS

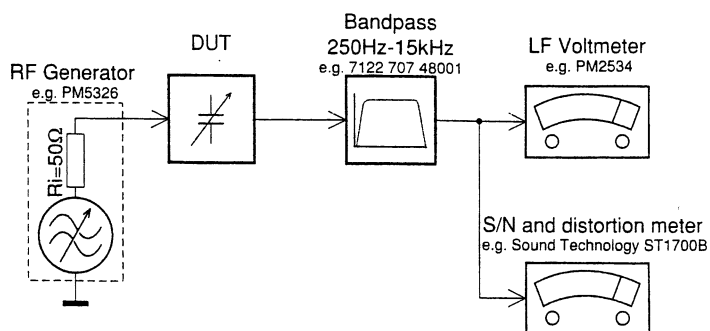
TORX T10 screwdriver with shaftlength 150mm.....	4822 395 50423
TORX screwdriver set SBC 163.....	4822 295 50145
Audio signal disc SBC 429.....	4822 397 30184
Playability test disc SBC 444.....	4822 397 30245
Test disc 5 (disc without errors) +	
Test disc 5A (disc with dropout errors, black spots and fingerprints)	
SBC 426/426A.....	4822 397 30096
Burn in test disc (65 min. 1kHz signal at -30 dB level without "pause").....	4822 397 30155
Universal test cassette Fe SBC 420.....	4822 397 30071

AVAILABLE ESD PROTECTION EQUIPMENT

anti-static table mat large 1200x650x1.25mm	4822 466 10953
small 600x650x1.25mm	4822 466 10958
anti-static wristband	4822 395 10223
connection box (3 press stud connections, 1M)	4822 320 11307
extendible cable (2m, 2M , to connect wristband to connection box)	4822 320 11305
connecting cable (3m, 2M , to connect table mat to connection box)	4822 320 11306
earth cable (1M , to connect any product to mat or to connection box)	4822 320 11308
KIT ESD3 (combining all 6 prior products - small table mat)	4822 310 10671
wristband tester	4822 344 13999

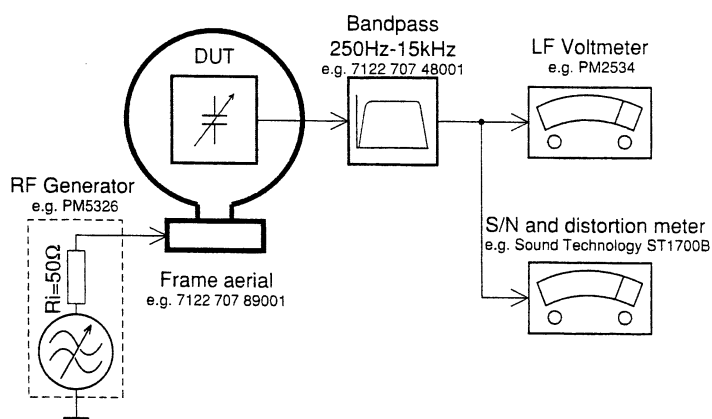
SERVICE MEASUREMENTS

Tuner FM



Use a bandpass filter to eliminate hum (50Hz, 100Hz) and disturbance from the pilotone (19kHz, 38kHz).

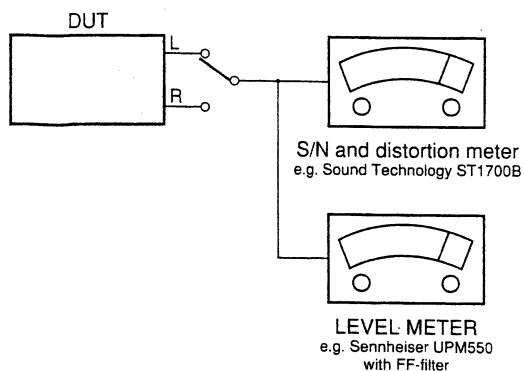
Tuner AM (MW,LW)



To avoid atmospheric interference all AM-measurements have to be carried out in a Faraday's cage.
Use a bandpass filter (or at least a high pass filter with 250Hz) to eliminate hum (50Hz, 100Hz).

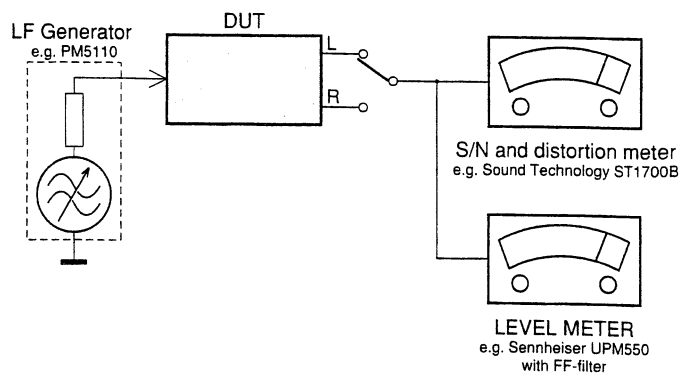
CD

Use Audio Signal Disc SBC429 4822 397 30184
(replaces test disc 3)



RECORDER

Use Universal Test Cassette Fe SBC420 4822 397 30071

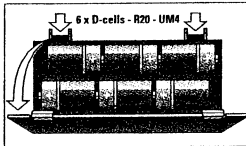


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Whenever convenient, use the power supply if you want to conserve battery life. Make sure you remove the plug from the set and wall socket before inserting batteries.

BATTERIES (OPTIONAL)

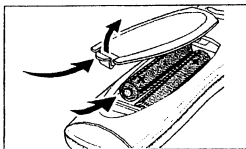
1. Open the battery compartment and insert six batteries, type **R-20, UM-4** or **D-cells**, (preferably alkaline) with the correct polarity as indicated by the "+" and "-" symbols inside the compartment.



Remote control (supplied)

Open the battery compartment and insert two batteries, type **AAA, R03** or **UM1** (preferably alkaline).

2. Replace the compartment door, making sure the batteries are firmly and correctly in place. The set is now ready to operate.
 - If **BATT LOW** lights up, battery power is running low.
 - The **BATT LOW** indicator eventually goes out if the batteries are too weak.

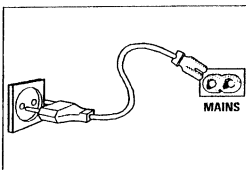


- *Incorrect use of batteries can cause electrolyte leakage and will corrode the compartment or cause the batteries to burst. Therefore:*

- *Do not mix battery types* e.g. alkaline with carbon zinc. Only use batteries of the same type for the set.
- When inserting new batteries, do not try to mix old batteries with the new ones.
- Remove the batteries if the set is not to be used for a long time.
- **Batteries contain chemical substances, so they should be disposed of properly.**

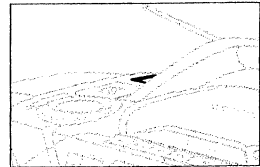
USING AC POWER

1. Check if the mains voltage **as shown on the type plate located on the back of the set**, corresponds to your local power supply. If it does not, consult your dealer or service centre.
2. If your set is equipped with a voltage selector, adjust the selector so that it matches with the local mains.
3. Connect the mains lead to the wall socket and the set is now ready for use.
4. To disconnect the set from the mains completely, remove the plug from the wall socket.



SWITCHING ON AND OFF

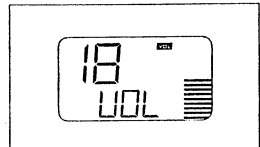
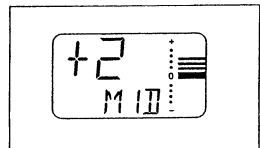
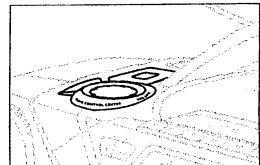
- Adjust the **POWER** slider to the desired sound source: **CD, TUNER** or **TAPE**.
- The set is switched off when the **POWER** slider is in the **TAPE/OFF** position and the keys on the tape deck are released.
- The volume, sound settings and tuner presets will be retained in the set's memory.



ADJUSTING VOLUME AND SOUND

1. Turn the **VOLUME/ SOUND CONTROL CENTER** control clockwise to increase or anti-clockwise to decrease volume on the set (or press **VOLUME 3** or **4** on the remote control).
 The display shows the volume level indication **vol** and a number from 0-32.
2. To adjust the bass, mid and high frequency levels, press **DIGITAL EQUALIZER** once or more until the desired option is displayed. While the option is shown, turn the **VOLUME/ SOUND CONTROL CENTER** control to increase or decrease (- 5 to + 5 maximum) the desired frequency.
 The **VOLUME** can also be adjusted in this way with a level range from 0-32.
3. Press **DIGITAL DBB** to switch dynamic bass boost on or off.
 If on, the **DIGITAL DBB** light goes on.
4. Press **INCREDIBLE SURROUND** to switch the surround sound effect on or off.
 If on, the **INCREDIBLE SURROUND** light goes on.

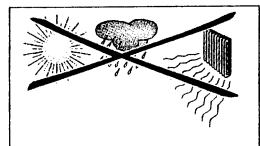
Note: *The effect of INCREDIBLE SURROUND may vary with different types of music.*



GENERAL INFORMATION

General maintenance

- Do not expose the set, batteries, CDs or cassettes to humidity, rain, sand or excessive heat caused by heating equipment or direct sunlight.
- To clean the set, use a soft, slightly dampened chamois leather. Do not use any cleaning agents containing alcohol, ammonia, benzene or abrasives as these may harm the housing.



Safety information

- Place the set on a hard and flat surface so that the system does not tilt. Make sure there is adequate ventilation to prevent the system from overheating.
- The mechanical parts of the set contain self-lubricating bearings and must not be oiled or lubricated.



Tuning to radio stations

1. Select **TUNER** source.

™ **LC** is displayed briefly and then the radio station frequency is shown.

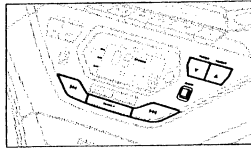
2. Press **BAND** once or more to select your waveband.

3. Press **SEARCH** or **S** (on the remote control, **TUNING** or **S**) and release when the frequency in the display starts running.

™ The tuner automatically tunes to a station of sufficient reception. Display shows **Search** during automatic tuning.

™ If an FM station is received in stereo, **STEREO** is shown.

4. Repeat step 3 if necessary until you find the desired station.
 - To tune to a weak station, press **SEARCH** or **S** briefly and repeatedly until you have found optimal reception.

**To improve radio reception:**

- For **FM**, pull out the telescopic aerial. Incline and turn the aerial. Reduce its length if the signal is too strong (very close to a transmitter).
- For **MW (AM)**, the set is provided with a built-in aerial so the telescopic aerial is not needed. Direct the aerial by turning the whole set.

Programming radio stations

You can store up to a total of 30 radio stations in the memory.

1. Tune to your desired station (see Tuning to radio stations).

2. Press **PROG** to activate programming.

™ Display: **PROG** flashes.

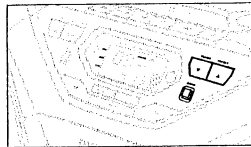
3. Press **PRESET 3** or **4** once or more to allocate a number from 1 to 30 to this station.

4. Press **PROG** again to confirm the setting.

™ Display: **PROG** disappears, the preset number and the frequency of the preset station are shown.

5. Repeat the above four steps to store other stations.

- You can overwrite a preset station by storing another frequency in its place.

**Tuning to preset stations**

Press **TUNER PRESET 4** or **3** until the desired preset station is displayed.

Changing tuning grid (some versions only)

In North and South America the frequency step between adjacent channels in the AM and FM band are **10 KHz** and **100 KHz** respectively. In the rest of the world this step is **9 KHz** and **50 KHz**. Usually the frequency step has been preset in the factory for your area.

1. Check that the set is in the **TAPE/OFF** position and switched off.

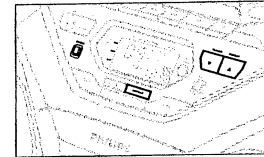
2. To select **9KHz**: Simultaneously, press **PROG** and **REPEAT** on the set.

3. Switch the set on to **TUNER** and then release the controls.

- To select **10KHz**: Repeat steps 1-3 but in step 2, simultaneously, press **PROG** and **TUNING S** on the set.

™ When you tune to radio stations, the display shows tuning in either steps of **9** or **10**.

™ All preset stations will be affected and you may need reprogramme the preset stations.

**Playing a CD**

1. Select **CD** source.

2. Press **OPEN•CLOSE** to open the CD door.

™ Display: **CD OPEN** when you open the CD door.

3. Insert a CD or CD-R(W) with the printed side facing up and press **OPEN•CLOSE** to close the CD door.

™ Display: **1 15C** as the CD player scans the contents of a CD. The total number of tracks and playing time are then shown.

™ Display: **0 15C** is shown if the CD R(W) is not finalised.

4. Press **PLAY•PAUSE 2;** (on the remote control **2;**) to start playback.

™ Display: Current track number and elapsed playing time of the track during CD playback.

5. To interrupt playback press **PLAY•PAUSE 2;**.

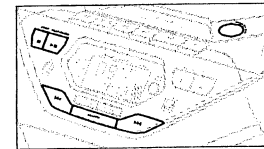
Press **PLAY•PAUSE 2;** again to resume play.

™ The display freezes and the elapsed playing time flashes when playback is paused.

6. To stop CD playback, press **STOP 9**

Note: *CD play will also stop when:*

- the CD door is opened;
- the CD has reached the end (unless you have selected **REPEAT ALL**);
- you select another source: **TAPE / TUNER**.



Selecting a different track

- Press **SEARCH** or **S** on the set, (on the remote control **i** or **™**) once or repeatedly until the desired track number appears in the display.
- If you have selected a track number shortly after loading a CD or in the PAUSE position, you will need to press **PLAY•PAUSE 2;** (on the remote control **2;**) to start playback.

Finding a passage within a track

1. Press and hold down on **SEARCH** or **S** (on the remote control **5** or **6**).
 - The CD is played at high speed and low volume.
2. When you recognize the passage you want, release **SEARCH** or **S**.
 - Normal playback continues.

Note:

During a CD programme or if SHUFFLE/ REPEAT active, searching is only possible within a track.

Different play modes: SHUFFLE and REPEAT

You can select and change the various play modes before or during playback. The play modes can also be combined with PROGRAM.

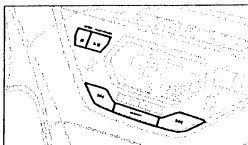
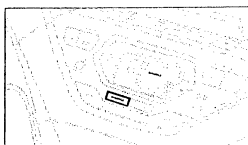
SHUFFLE - tracks of the entire CD/ programme are played in random order

SHUFFLE and REPEAT ALL - to repeat the entire CD/ programme continuously in random order

REPEAT ALL - to repeat the entire CD/ programme

REPEAT and SHUFFLE REPEAT - plays the current (random) track continuously

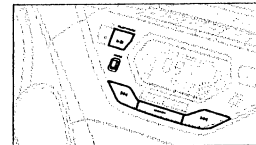
1. To select your play mode, press the **SHUFFLE** or **REPEAT** button before or during playback until the display shows the desired function.
2. Press **PLAY•PAUSE 2;** (on the remote control **2;**) to start playback if in the STOP position.
 - Playback starts immediately if you have selected a SHUFFLE mode.
3. To return to normal playback, press the respective **SHUFFLE** or **REPEAT** button until the various SHUFFLE / REPEAT modes are no longer displayed.
 - *You can also press STOP 9 to cancel your play mode*



Programming track numbers

Programme in the STOP position to select and store your CD tracks in the desired sequence. If you like, store any track more than once. Up to 20 tracks can be stored in the memory.

1. Use the **SEARCH** or **S** on the set, (on the remote control **i** or **™**) to select your desired track number.
2. Press **PROG**.
 - ™ Display: **PROG** and the selected track number. **PROG** appears briefly.
 - ™ If you attempt to programme without first selecting a track number, **NO SEL** is shown.
3. Repeat steps 1-2 to select and store all desired tracks.
 - ™ **FULL** is displayed if you attempt to programme more than 20 tracks.
4. To start playback of your CD programme, press **PLAY•PAUSE 2;** (on the remote control **2;**).
- ™ If you have selected the tracks during CD play, first press **STOP 9**, then **PLAY•PAUSE 2;**.



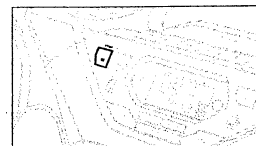
Reviewing the programme

In the stop position or during playback, press and hold down **PROG** for a while until the display shows all your stored track numbers in sequence.

Erasing a programme

You can erase the programme by:

- pressing **STOP 9** once in the STOP position;
- pressing **STOP 9** twice during playback;
- The display shows **PROG** briefly and **PROG** disappears.

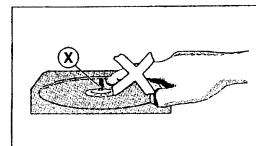


The programme is also erased by:

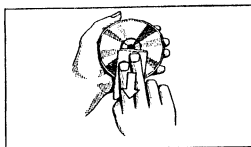
- pressing the CD door open;
- selecting another source: TAPE / TUNER.

CD player and CD handling

- If the CD player cannot read CDs correctly, use a commonly available cleaning CD to clean the lens before taking the set to repair. Other cleaning methods may destroy the lens.
- The lens of the CD player should never be touched!
- Sudden changes in the surrounding temperature can cause condensation to cloud over on the lens of your CD player. Playing a CD is then not possible. Do not attempt to clean the lens but leave the set in a warm environment until the moisture evaporates.
- Always keep the CD compartment closed to avoid dust on the lens.

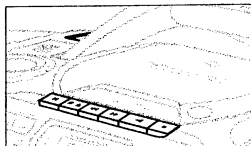


- To take a CD out of its box, press the centre spindle while lifting the CD. Always pick up the CD by the edge and return the CD to its box after use to avoid scratching and dust.
- To clean the CD, wipe in a straight line from the centre towards the edge using a soft, lint-free cloth. Do not use cleaning agents as they may damage the disc.
- *Never* write on a CD or attach any stickers to it.



Cassette playback

1. Select **TAPE** source.
- ™ The display shows **TAPE** throughout tape operation.
2. Press **OPEN•STOP / 9** to open the cassette door.
3. Insert a recorded cassette and close the cassette door.
4. Press **PLAY 1** to start playback.
5. To interrupt playback press **PAUSE ;**. To resume, press this key again.
6. By pressing **SEARCH 5** or **6** on the set fast winding of the tape is possible in both directions.
7. To stop the tape, press **OPEN•STOP / 9**.
 - The keys are automatically released at the end of the tape, except if **PAUSE ;** has been activated.



GENERAL INFORMATION ON RECORDING

- Recording is permissible insofar as copyright or other rights of third parties are not infringed.
- This deck is not suited for recording on CHROME (IEC II) or METAL (IEC IV) type cassettes. For recording, use only NORMAL type cassettes (IEC I) on which the tabs have not been broken.
- The best recording level is set automatically. Altering the VOLUME, INCREDIBLE SURROUND, DIGITAL EQUALIZER or DBB controls will not affect the recording in progress.
- At the very beginning and end of the tape, no recording will take place during the 7 seconds, when the leader tape passes the recorder heads.
- To protect a tape from accidental erasure, have the tape in front of you and break out the left tab. Recording on this side is no longer possible. To record over this side again, cover the tabs with a piece of adhesive tape.

Synchro Start CD recording

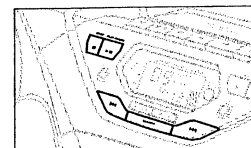
1. Select CD source.
2. Insert a CD and if desired, programme track numbers.
3. Press **OPEN•STOP / 9** to open the cassette holder.
4. Insert a suitable tape into the cassette deck and close the cassette door.

5. Press **RECORD O** to start recording.

- Playing of the CD programme starts automatically from the beginning of the programme. It is not necessary to start the CD player separately.

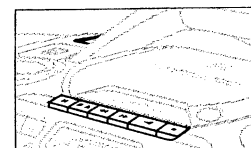
To select and record a particular passage within a track:

- Press and hold down on **SEARCH** or **S** (on the remote control **5** or **6**).
- When you recognize the passage you want, release **SEARCH** or **S**.
- To interrupt CD playback press **PLAY•PAUSE 2;** (on the remote control **2;**).
- Recording will begin from this exact point in the track when you press **RECORD 9**.
- 6. For brief interruptions during recording, press **PAUSE ;**. To resume recording, press **PAUSE ;** again.
- 7. To stop recording, press **OPEN•STOP / 9**.



Recording from the tuner

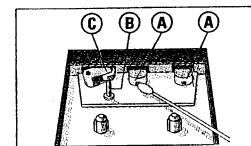
1. Tune to the desired radio station (see Tuning to radio stations).
2. Press **OPEN•STOP / 9** to open the cassette door.
3. Insert a suitable tape into the cassette deck and close the cassette door.
4. Press **RECORD O** to start recording.
5. For brief interruptions, press **PAUSE ;**. To resume recording, press **PAUSE ;** again.
6. To stop recording, press **OPEN•STOP / 9**.



Tape deck maintenance

To ensure quality recording and playback of the tape deck, clean parts **A**, **B** and **C** shown in the diagram below, after approx. 50 hours of operation, or on average once a month. Use a cotton bud slightly moistened with alcohol or a special head cleaning fluid to clean both decks.

1. Open the cassette holder by pressing **OPEN•STOP / 9**.
2. Press **PLAY 1** and clean the rubber pressure rollers **C**.
3. Press **PAUSE ;** and clean the magnetic heads **A** and also the capstan **B**.
4. After cleaning, press **OPEN•STOP / 9**.



Note:

Cleaning of the heads can also be done by playing a cleaning cassette through once.

If a fault occurs, first check the points listed below before taking the set for repair.
If you are unable to remedy a problem by following these hints, consult your dealer or service centre.

WARNING: Do not open the set as there is a risk of electric shock. Under no circumstances should you try to repair the set yourself, as this will invalidate the guarantee.

PROBLEM

- POSSIBLE CAUSE
- REMEDY

No sound/power

- VOLUME not adjusted
- Adjust the VOLUME
- Headphones connected
- Disconnect headphones
- Mains lead not securely connected
- Connect AC mains lead properly

Severe radio hum or noise

- Electrical interference: set too close to TV, VCR or computer
- Increase the distance

Poor radio reception

- Weak radio signal
- FM: Direct the FM telescopic aerial for optimum reception

CD indication

- CD badly scratched or dirty
- Replace/ clean CD, see Maintenance
- Laser lens steamed up
- Wait until lens has cleared

CD indication

- CD-R(W) is blank or the disc is not finalised
- Use a finalised CD-R(W)

The CD skips tracks

- CD damaged or dirty
- Replace or clean CD
- SHUFFLE or PROGRAM is active
- Switch off SHUFFLE / PROGRAM

Poor cassette sound quality

- Dust and dirt on the heads, etc.
- Clean deck parts, see Maintenance
- Use of incompatible cassette types (METAL or CHROME)
- Only use NORMAL (IEC I) for recording

Recording does not work

- Cassette tab(s) may be broken
- Apply a piece of adhesive tape over the missing tab space.

Remote control does not function properly

- Batteries exhausted
- Insert fresh batteries
- Batteries incorrectly inserted
- Insert the batteries correctly
- Distance/ angle between the set too large
- Reduce the distance/ angle.

Environmental information

All unnecessary packaging material has been omitted. We have done our utmost to make the packaging easy to separate into three mono-materials: cardboard (box), expandable polystyrene (buffer), polyethylene (bags, protective foam).

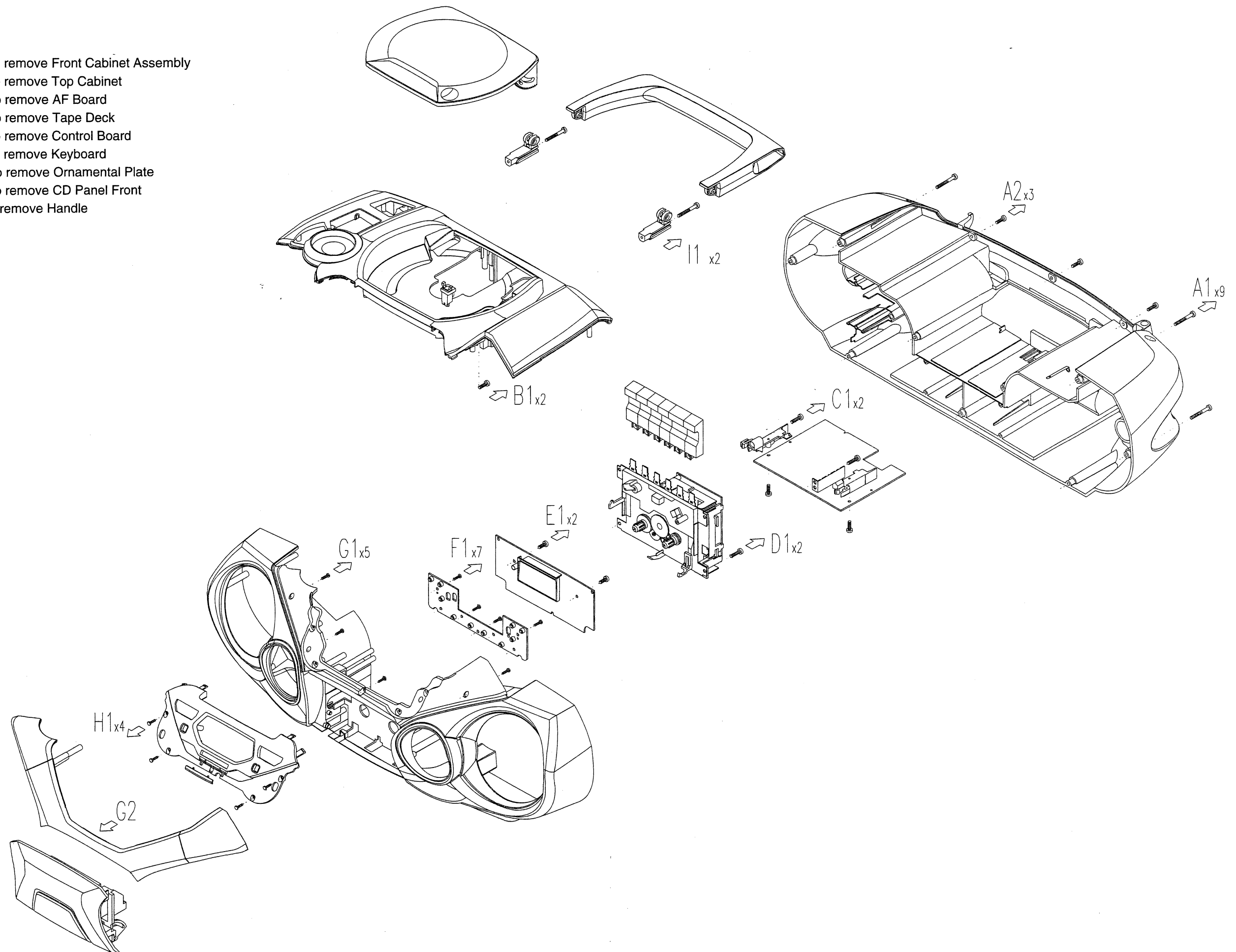
Your set consists of materials which can be recycled if disassembled by a specialized company. Please observe the local regulations regarding the disposal of packing materials, exhausted batteries and old equipment.

DISASSEMBLY DIAGRAM

4-1

4-1

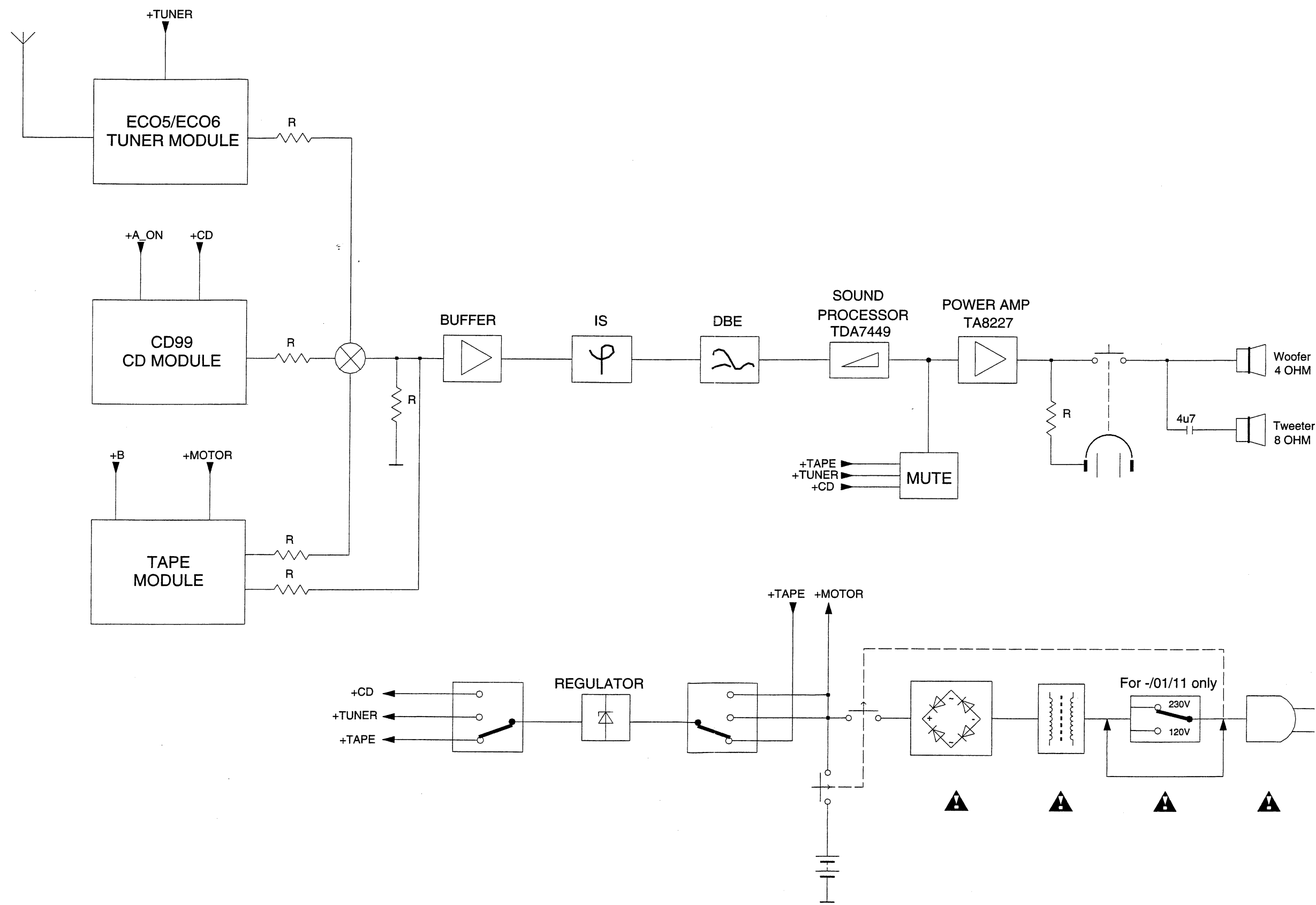
- A. To remove Front Cabinet Assembly
- B. To remove Top Cabinet
- C. To remove AF Board
- D. To remove Tape Deck
- E. To remove Control Board
- F. To remove Keyboard
- G. To remove Ornamental Plate
- H. To remove CD Panel Front
- I. To remove Handle



BLOCK DIAGRAM

5-1

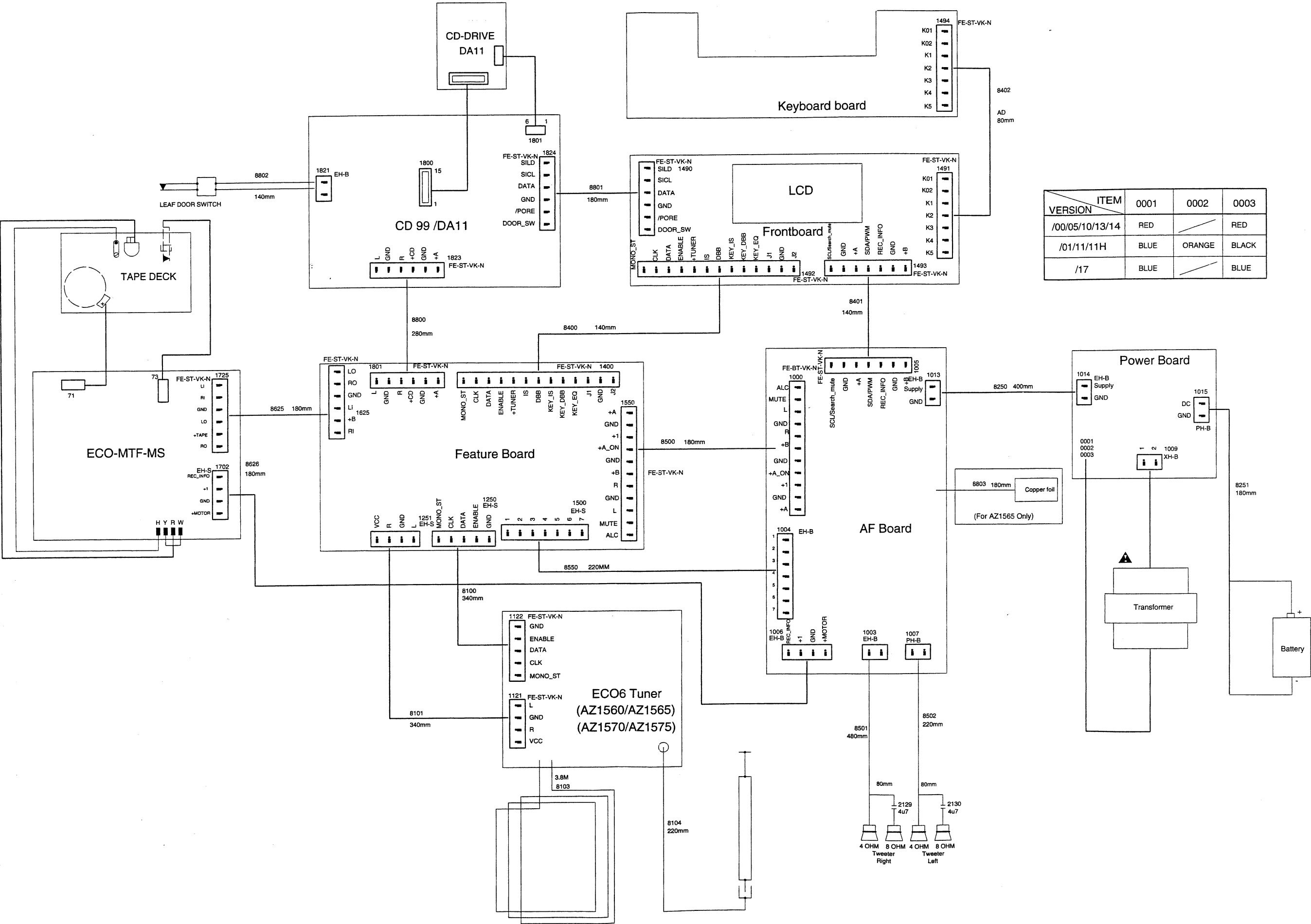
5-1



WIRING DIAGRAM

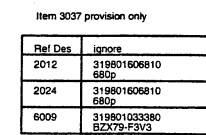
6-1

6-1



VERSION	ITEM	0001	0002	0003
/00/05/10/13/14		RED		RED
/01/11/11H		BLUE	ORANGE	BLACK
/17		BLUE		BLUE

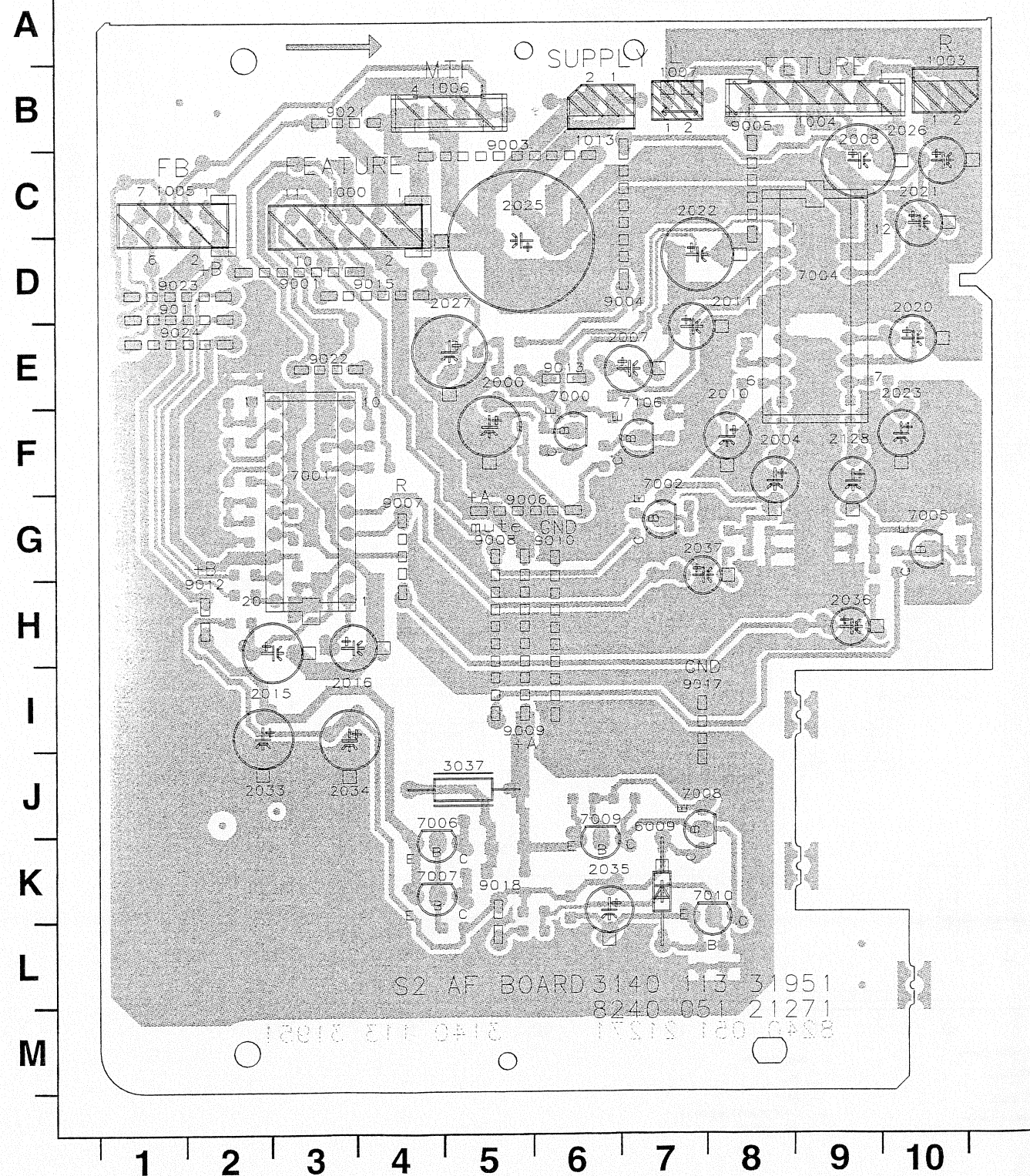
7-1



AF BOARD - LAYOUT DIAGRAM

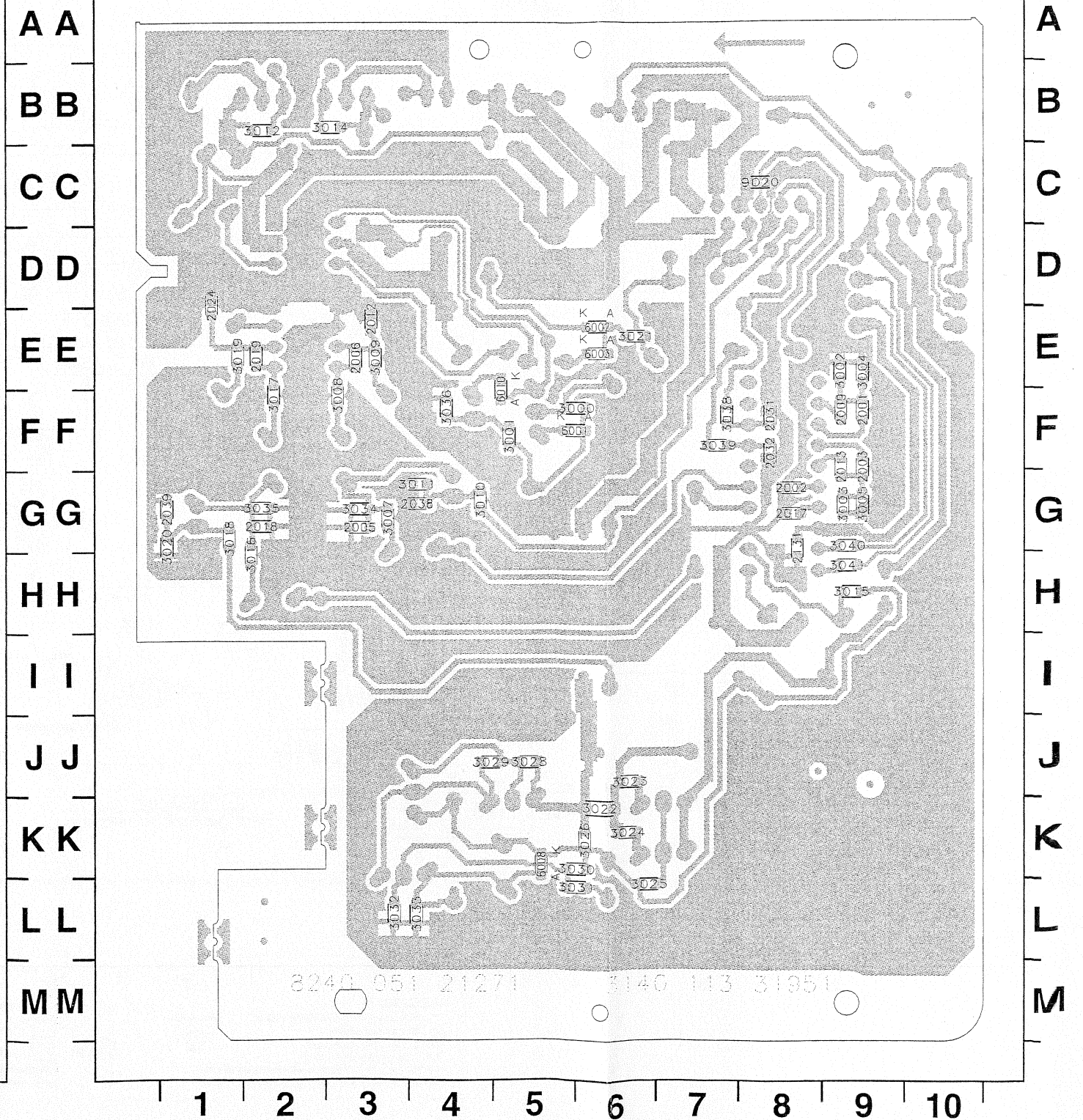
1000 C3	2007 E7	2023 E10	2128 F9	7007 K4	9006 G5	9017 I7
1003 A10	2008 B9	2025 C5	3037 J5	7008 J7	9007 G4	9018 K5
1004 B9	2010 E8	2026 B10	6009 J7	7009 J6	9008 G5	9021 B3
1005 C1	2011 D8	2027 D5	7000 E6	7010 K8	9009 I5	9022 E3
1006 B5	2015 I2	2033 J2	7001 F3	7106 E7	9010 G6	9023 D1
1007 B7	2016 I3	2034 J3	7002 F7	9001 D3	9011 D1	9024 E1
1013 B6	2020 D10	2035 K6	7004 D9	9003 B5	9012 H2	
2000 E5	2021 C10	2036 H9	7005 G10	9004 D7	9013 E6	
2004 F8	2022 C7	2037 G7	7006 J4	9005 B8	9015 D4	

1 2 3 4 5 6 7 8 9 10



2001 F9	2017 G8	2131 G8	3008 F3	3017 F2	3025 L6	3034 G3	6002 E6
2002 G8	2018 G2	3000 F6	3009 E3	3018 G1	3026 K6	3035 G2	6003 E6
2003 F9	2019 E2	3001 F5	3010 G4	3019 E1	3028 J5	3036 F4	6008 K5
2005 G3	2024 D1	3002 E9	3011 G4	3020 G1	3029 J4	3038 F7	6010 F5
2006 E3	2031 F8	3003 G9	3012 B2	3021 E6	3030 K6	3039 F7	9020
2009 F9	2032 F8	3004 E9	3014 B3	3022 K6	3031 L6	3040 G9	
2012 E3	2038 G4	3005 G9	3015 H9	3023 J6	3032 L3	3041 H9	
2013 F9	2039 G1	3007 G3	3016 H2	3024 K6	3033 L4	6001 F5	

1 2 3 4 5 6 7 8 9 10



[illegible]

VERSION	6120	3156	3157	3170	7111
/00 /02 FM/MW/LW	X				
/00 /02 FM/MW					
/01 FM/MW					
/14 FM-OIRT/MW					
/17 FM/AM					
	X	component mounted			

* ... only assembled in FM/AM-version

Ⓟ...for provision only

USA ... for USA version only


LW ... for LW version only

LW frame ... for LW version with frame aerial only



E. EU ... for East European version only

SMD

4



SMD jump
41xx
0R

...V FM mode stereo
 ...V MW mode
 ...V LW mode

voltages measured while
 set is tuned to a strong transmitter

Signal path

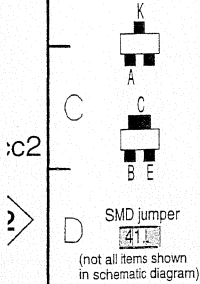
- FM
- AM
- MPX (Audio Frequency)
- AF - left/right

9113 D6
9114 E6
9115 D7

A
B
C
D
E

6182 C7 7124 C2
6183 C7 7180 B7
7101 C5 7181 C7
7102 D3 7182 D7
7103 E6 7183 B7
7109 E5
7111 A5
7122 B2

A
B
C
D
E



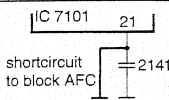
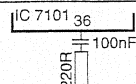
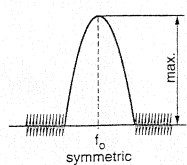
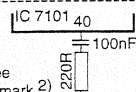

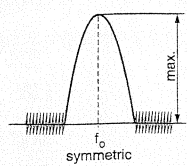
:c2

2

E

8-2
TUNER ADJUSTMENT TABLE (ECO6 FM/MW- and FM/MW/LW - versions with AM-frame aerial)

8-2

Waverange	Input frequency	Input	Tuned to	Adjust	Output	Scope/Voltmeter
VARICAP ALIGNMENT						
FM 87.5 - 108MHz (65.81 - 74, 87.5 - 108MHz)			108MHz	5130	1	8V ±0.2V
			87.5MHz (65.81MHz)	check		4.3V ±0.5V (1.2V ±0.5V)
MW FM/AM-version, 10kHz grid 530 - 1700kHz			1700kHz	5123		8V ±0.2V
			530kHz	check		1.1V ±0.4V
FM/MW-version, 9kHz grid 531 - 1602kHz			1602kHz	5123		6.9V ±0.2V
			531kHz	check		1.1V ±0.4V
LW 153 - 279kHz			279kHz	5122		8V ±0.2V
			153kHz	check		1.1V ±0.4V
MW FM/MW/LW- version, 9kHz grid 531 - 1602kHz			1602kHz	5123		8V ±0.2V
			531kHz	check		1.1V ±0.4V
FM IF						
FM	10.7MHz, 45mV continuous wave	D		5119	2	0 ± 3 mV DC
FM RF						
FM 87.5 - 108MHz (65.81 - 74, 87.5 - 108MHz)	108MHz	A mod=1kHz f=±22.5kHz	108MHz	2155	4	MAX
	87.5MHz (65.81MHz)		87.5MHz (65.81MHz)	5131		
VCO						
FM	98MHz, 1mV continuous wave	A	98MHz	3142	3	152kHz ±1kHz ¹⁾
AM IF						
MW	450kHz connect pin 6 of IC 7101 (AM Osc.) with 3.3k to Vcc	C f=±10kHz V _{RF} = 0.5mV (as low as possible)		5111	5	
				5112		
AM AFC MW			C continuous wave V _{RF} = 2mV		5114	2
AM RF ³⁾						
MW ⁴⁾ FM/MW/LW- and FM/MW-version (9kHz grid) 531 - 1602kHz	1494kHz	B 	1494kHz	2106	5	
	558kHz		558kHz	5102		
LW	198kHz		198kHz	5103		
MW FM/AM-version, 10kHz grid 530 - 1700kHz	1500kHz		1500kHz	2106		
	560kHz		560kHz	5102		

Use Service Testprogram. By selecting the TUNER TEST test frequencies will be stored as preset frequencies automatically.

¹⁾ If sensitivity of frequency counter is too low adjust to max. channel separation
(input signal: stereo left 90% + 9%, adjust output on right channel to minimum)

³⁾ For AM RF adjustments the original frame antenna has to be used !

²⁾ RC network serves for damping the IF-filter while adjusting the other one.

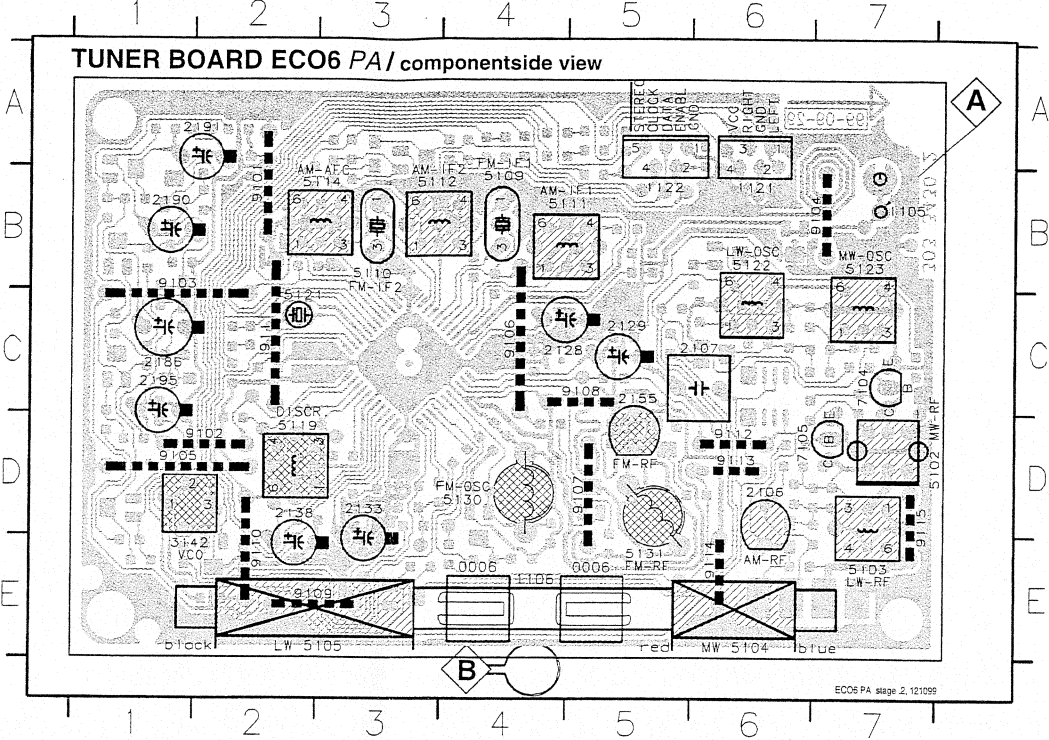
⁴⁾ MW has to be aligned before LW.

↑ Repeat

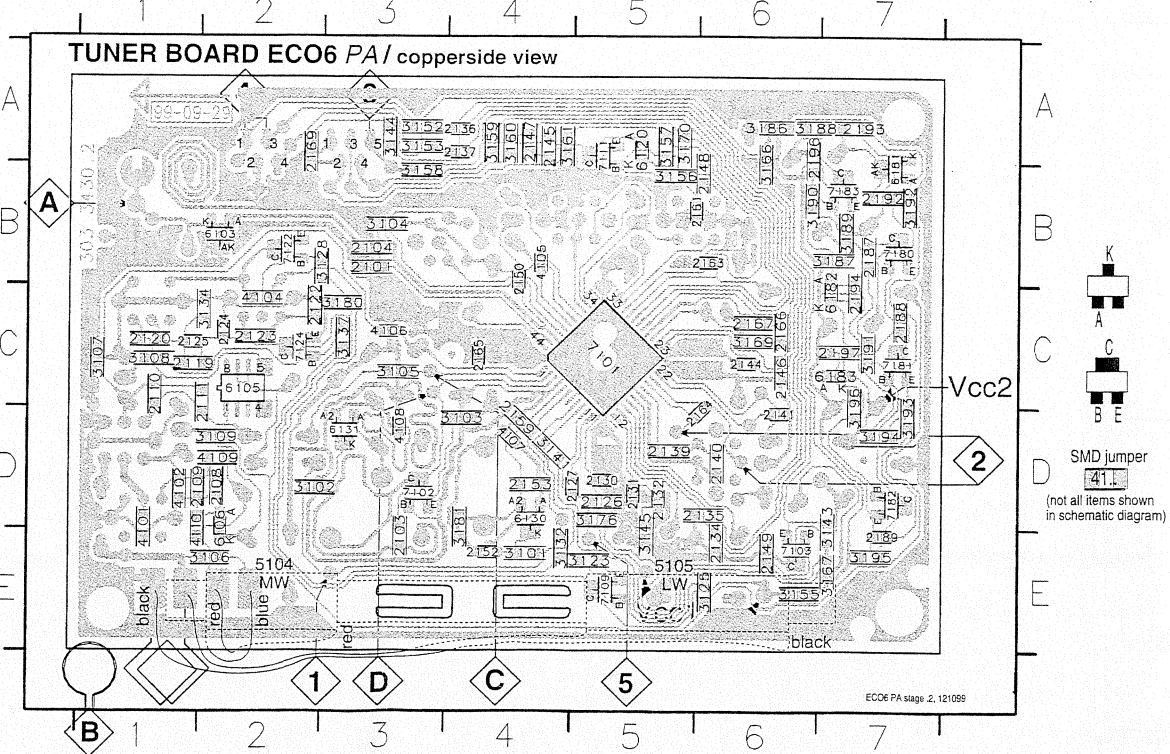
ECO6, Sys + PA with frame aerial, 070799

8-2
TUNER BOARD ECO6 - LAYOUT DIAGRAM

1105 B7 2106 D6 2129 C5 2155 C5 2191 A2 5102 D7 5110 B3 5114 B3 5122 B6 5131 E5 9101 B2 9104 B7 9107 D5 9110 E2 9113 D6
1121 B6 2107 C6 2133 D3 2186 C1 2195 C1 5103 E7 5111 B4 5119 D2 5123 B7 7104 C7 9102 D2 9105 D1 9108 C5 9111 C2 9114 E6
1122 B5 2128 C4 2138 D2 2190 B1 3142 E1 5109 B4 5112 B3 5121 C2 5130 D4 7105 D6 9103 B1 9106 C4 9109 E2 9112 D6 9115 D7

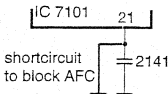
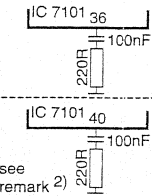
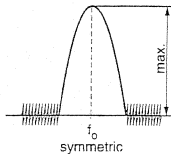

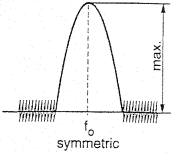


2101 B3 2120 C1 2131 D5 2141 D6 2152 E4 2167 C6 2196 A6 3107 C1 3137 C3 3156 B5 3169 C6 3189 B7 4101 D1 4110 D1 6182 C7 7124 C2
2103 E3 2122 C2 2132 D5 2144 C6 2153 D4 2169 A2 2197 C7 3108 C1 3141 D4 3157 A5 3170 A5 3190 B6 4102 D1 6103 B2 6183 C7 7180 B7
2104 B3 2123 C2 2134 E6 2145 A4 2159 D4 2187 B7 3101 E4 3109 D2 3143 D7 3158 B3 3176 D5 3192 C7 4104 C2 6105 C2 7101 C3 7181 C7
2108 D2 2124 C2 2135 D6 2146 C6 2161 B5 2188 C7 3102 D2 3123 E5 3144 A3 3159 A4 3180 C3 3192 B7 4105 B4 6106 D2 7102 D3 7182 D7
2109 D1 2125 C1 2136 A4 2147 A4 2163 B6 2189 E7 3103 D4 3125 E6 3145 E5 3160 A5 3181 D4 3193 D7 4106 C3 6120 A5 7103 E6 7183 B7
2110 C1 2126 D5 2137 A4 2148 B6 2164 D6 2192 B7 3104 B3 3128 B2 3152 A3 3161 A4 3186 A6 3194 D7 4107 D4 6130 D4 7109 E5
2111 C2 2127 D5 2139 D5 2149 E6 2165 C4 2193 A7 3105 C3 3132 E4 3153 A3 3166 B6 3187 B7 3195 E7 4108 D3 6131 D3 7111 A5
2119 C1 2130 D5 2140 D6 2150 B4 2166 C6 2194 C7 3106 E2 3134 C2 3155 E6 3167 E7 3188 A6 3196 C7 4109 D2 6181 B7 7122 B2



These assembly drawings show a summary of all possible versions.
For components used in a specific version see schematic diagram respectively partslist.

8-2
TUNER ADJUSTMENT TABLE (ECO6 FM/MW- and FM/MW/LW - versions with AM-frame aerial)

Waverange	Input frequency	Input	Tuned to	Adjust	Output	Scope/Voltmeter	
VARICAP ALIGNMENT							
FM 87.5 - 108MHz (65.81 - 74, 87.5 - 108MHz)			108MHz	5130	1	8V ±0.2V	
			87.5MHz (65.81MHz)	check		4.3V ±0.5V (1.2V ±0.5V)	
MW FM/AM-version, 10kHz grid 530 - 1700kHz			1700kHz	5123		8V ±0.2V	
			530kHz	check		1.1V ±0.4V	
FM/MW-version, 9kHz grid 531 - 1602kHz			1602kHz	5123		6.9V ±0.2V	
			531kHz	check		1.1V ±0.4V	
LW 153 - 279kHz			279kHz	5122		8V ±0.2V	
			153kHz	check		1.1V ±0.4V	
MW FM/MW/LW- version, 9kHz grid 531 - 1602kHz		1602kHz	5123	8V ±0.2V			
		531kHz	check	1.1V ±0.4V			
FM IF							
FM	10.7MHz, 45mV continuous wave	D		5119	2	0 ± 3 mV DC	
FM RF							
FM 87.5 - 108MHz (65.81 - 74, 87.5 - 108MHz)	108MHz	A mod=1kHz f=±22.5kHz	108MHz	2155	4	MAX	
	87.5MHz (65.81MHz)		87.5MHz (65.81MHz)	5131			
VCO							
FM	98MHz, 1mV continuous wave	A	98MHz	3142	3	152kHz ±1kHz ¹⁾	
AM IF							
MW	450kHz connect pin 6 of IC 7101 (AM Osc.) with 3.3k to Vcc	C f=±10kHz V _{RF} = 0.5mV (as low as possible)		5111	5		
				5112			
AM AFC MW			C continuous wave V _{RF} = 2mV				5114
AM RF ³⁾							
MW ⁴⁾ FM/MW/LW- and FM/MW-version (9kHz grid) 531 - 1602kHz	1494kHz	B 	1494kHz	2106	5		
			558kHz	558kHz			5102
LW	198kHz		198kHz	5103			
MW FM/AM-version, 10kHz grid 530 - 1700kHz	1500kHz		f = ±30kHz V _{RF} as low as possible	1500kHz			2106
	560kHz		560kHz	5102			

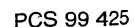
Use Service Testprogram. By selecting the TUNER TEST test frequencies will be stored as preset frequencies automatically.

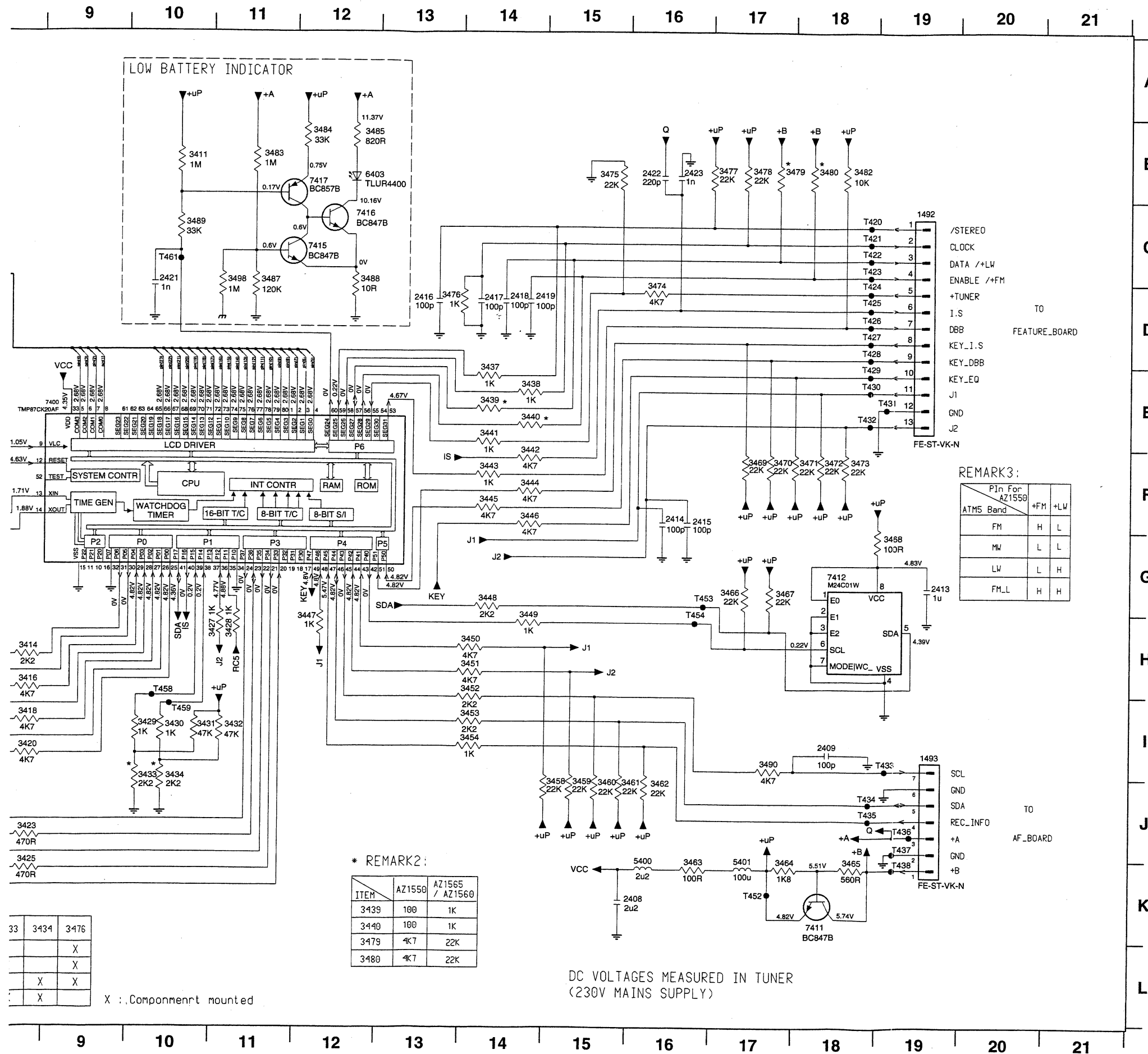
- ¹⁾ If sensitivity of frequency counter is too low adjust to max. channel separation (input signal: stereo left 90% + 9%, adjust output on right channel to minimum)
²⁾ RC network serves for damping the IF-filter while adjusting the other one.
³⁾ For AM RF adjustments the original frame antenna has to be used !
⁴⁾ MW has to be aligned before LW.

↑ Repeat

9-1

9-1



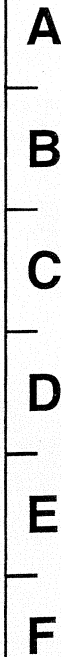
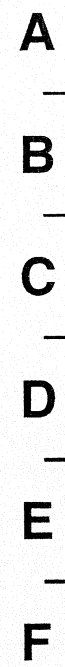


1400 F8	3429 I10	3484 B12	T451 K3
1490 J2	3430 I10	3485 B12	T452 K17
1491 H2	3431 I10	3487 C11	T453 G16
1492 C19	3432 I11	3488 C12	T454 H16
1493 I19	3433 J10	3489 C10	T456 B2
2400 K3	3434 J10	3490 I17	T457 B4
2401 F5	3437 E14	3498 C11	T458 H10
2402 E8	3438 E14	5400 K16	T459 I10
2403 H6	3439 E14	5401 K17	T460 F6
2404 H6	3440 E14	6400 D3	T461 C10
2406 B2	3441 E14	6401 E4	
2407 C4	3442 F14	6403 B12	
2408 K16	3443 F14	7400 E9	
2409 I18	3444 F14	7410 E5	
2413 G19	3445 F14	7411 K18	
2414 F16	3446 F14	7412 G18	
2415 F16	3447 H12	7413 A4	
2416 D13	3448 G14	7414 B2	
2417 D14	3449 H14	7415 C12	
2418 D14	3450 H14	7416 C12	
2419 D14	3451 H14	7417 B12	
2420 J4	3452 H14	T420 C18	
2421 C10	3453 I14	T421 C18	
2422 B16	3454 I14	T422 C18	
2423 B16	3455 A2	T423 C18	
3400 E3	3456 A3	T424 D18	
3401 D4	3457 B3	T425 D18	
3402 D5	3458 J15	T426 D18	
3403 E6	3459 J15	T427 D18	
3404 E7	3460 J15	T428 D18	
3405 E7	3461 J16	T429 E18	
3406 G4	3462 J16	T430 E18	
3407 G4	3463 K16	T431 E19	
3408 G5	3464 K17	T432 E18	
3409 G5	3465 K18	T433 I19	
3410 G5	3466 G17	T434 J18	
3411 B10	3467 G17	T435 J18	
3414 H8	3468 G19	T436 J19	
3415 H8	3469 F17	T437 J19	
3416 H8	3470 F17	T438 K19	
3417 I8	3471 F18	T439 H3	
3418 I8	3472 F18	T440 H3	
3419 I8	3473 F18	T441 H3	
3420 I8	3474 D16	T442 I3	
3421 J5	3475 B15	T443 I3	
3422 J8	3476 D13	T444 I3	
3423 J8	3477 B17	T445 I3	
3424 J8	3478 B17	T446 J3	
3425 K8	3479 B17	T447 J3	
3426 K8	3480 B18	T448 J3	
3427 H11	3482 B18	T449 K3	
3428 H11	3483 B11	T450 K3	

1 2 3 4 5 6 7 8 9 10 11 12 13 14



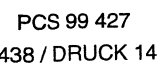
A
B
C
D
E
F



A
B
C
D
E
F

10-1

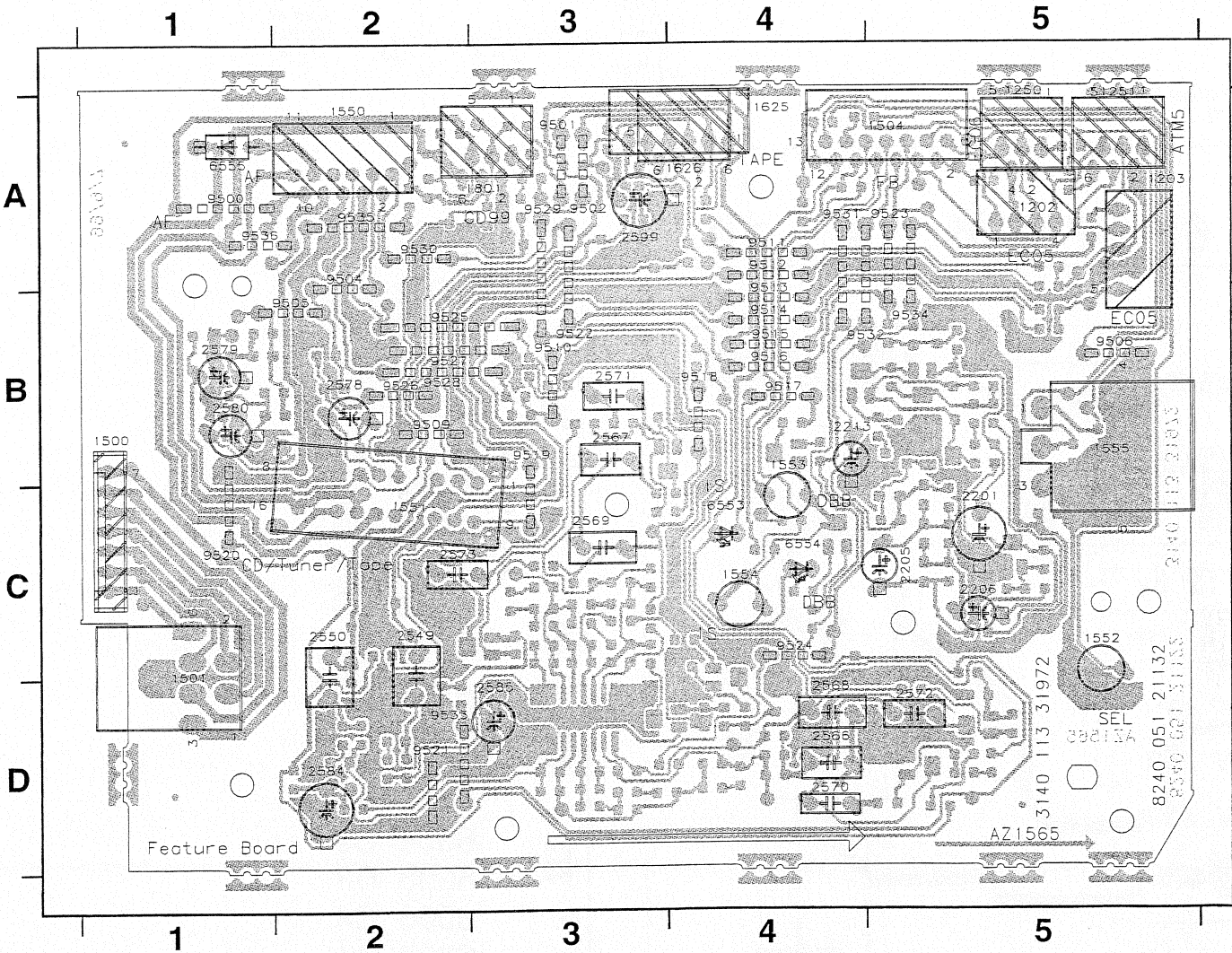
10-1

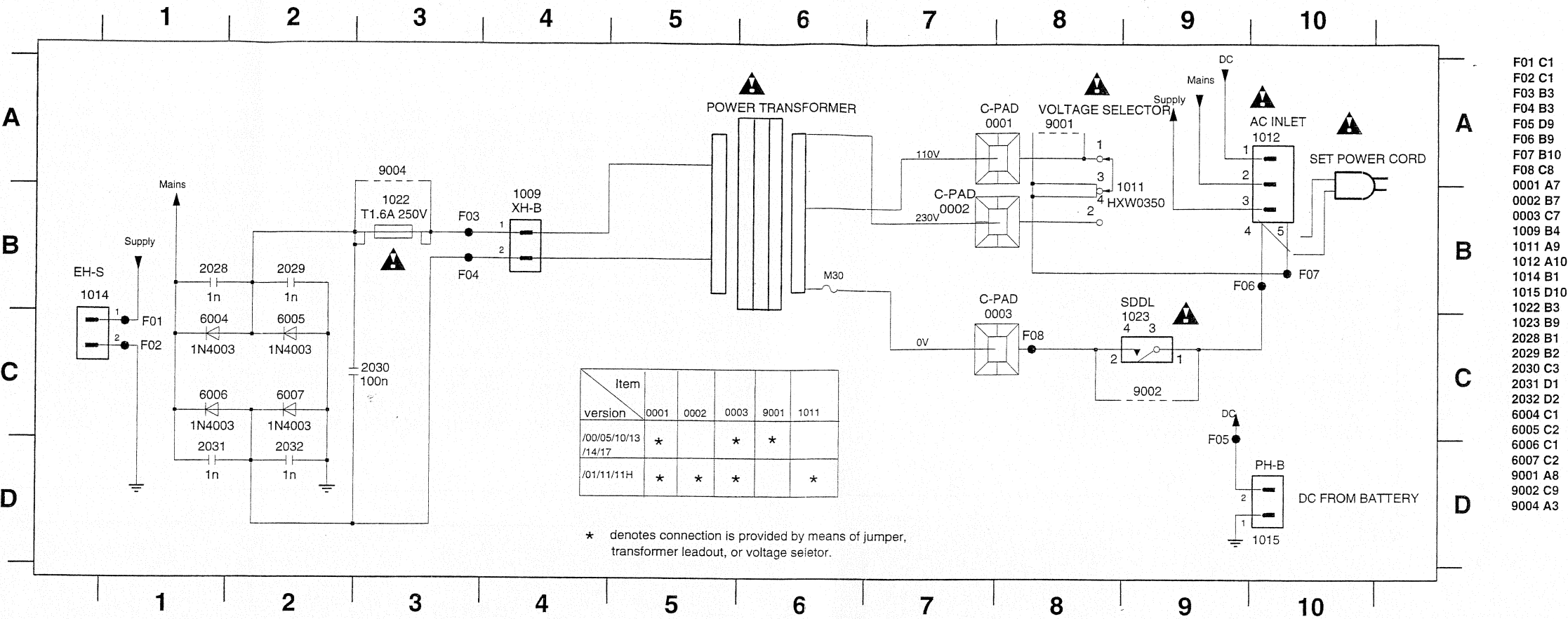


FEATURE BOARD - LAYOUT DIAGRAM

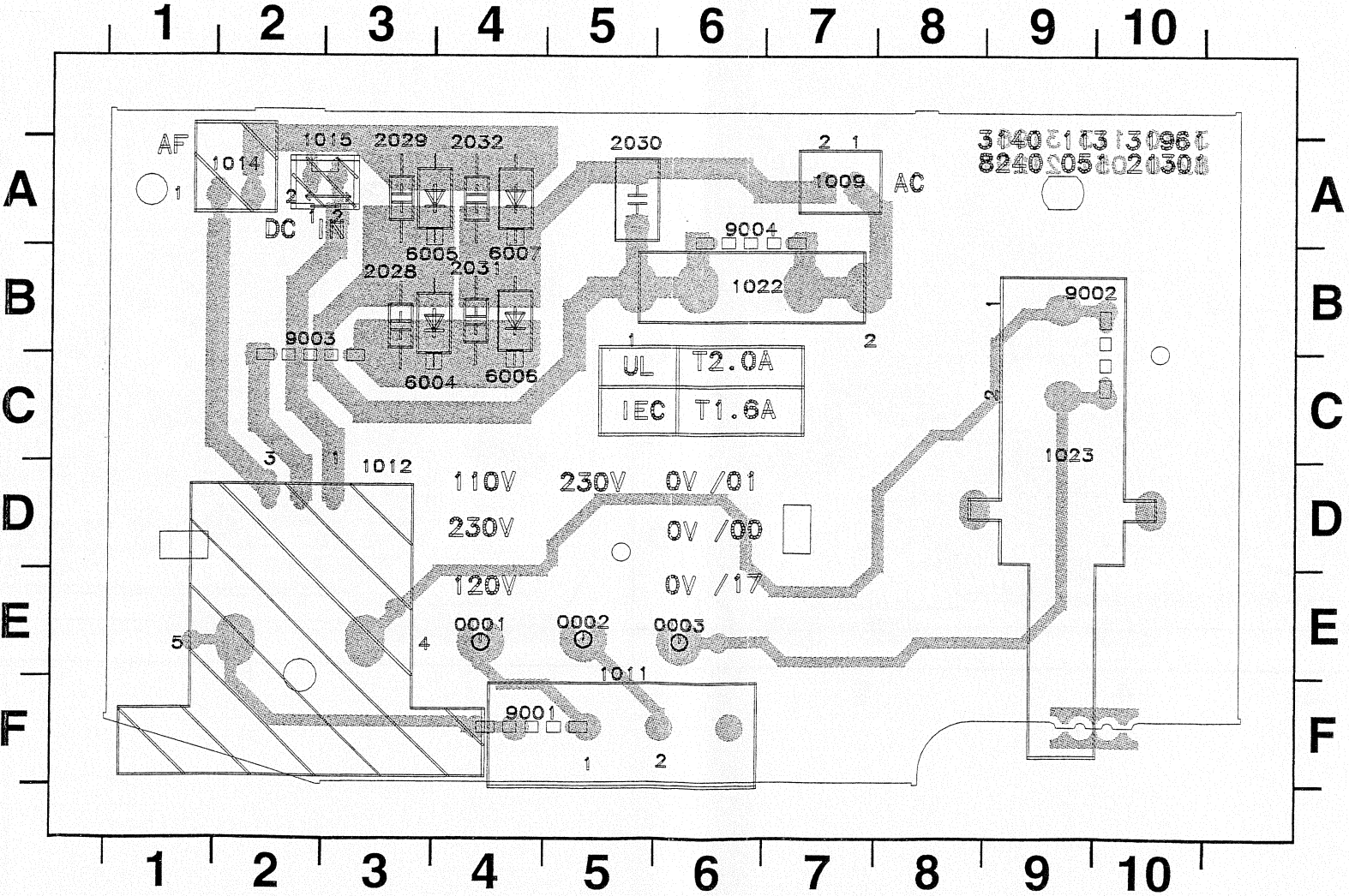
1202 A5	1552 C5	2206 C5	2571 B3	6553 C4	9509 B2	9518 B4	9527 B2	9536 A1
1203 A5	1553 B4	2213 B4	2572 D5	6554 C4	9510 B3	9519 B3	9528 B2	
1250 A5	1554 C4	2549 C2	2573 C2	6555 A1	9511 A4	9520 C1	9529 A3	
1251 A5	1555 B5	2550 C2	2578 B2	9500 A1	9512 A4	9521 D2	9530 A2	
1500 B1	1625 A4	2566 D4	2579 B1	9501 A3	9513 B4	9522 B3	9531 A4	
1501 C1	1626 A4	2567 B3	2580 B1	9502 A3	9514 B4	9523 A5	9532 B4	
1504 A5	1801 A3	2568 D4	2584 D2	9504 A2	9515 B4	9524 C4	9533 D2	
1550 A2	2201 C5	2569 C3	2585 D3	9505 B2	9516 B4	9525 B2	9534 B5	
1551 C2	2205 C5	2570 D4	2599 A3	9506 B5	9517 B4	9526 B2	9535 A2	

2200 B2	2556 B1	2587 D3	3206 B2	3565 C4	3588 C2	3608 B6	4500 B5	4520 A3	6551 B5
2202 C2	2557 B1	2588 C2	3207 B2	3566 D5	3589 C4	3609 B6	4501 A3	4521 C5	6552 B5
2203 C2	2558 D4	2589 A4	3208 B2	3567 D5	3590 D2	3610 B5	4502 B3	4522 B2	7200 B2
2204 C2	2559 C4	2590 A5	3209 B2	3573 C4	3591 B4	3611 B3	4503 C4	4523 B2	7201 C2
2207 C1	2560 D3	2591 C3	3210 B2	3574 D4	3592 D2	3612 B3	4504 C4	4524 A1	7202 B2
2208 B2	2561 C4	2592 D3	3550 A4	3575 C4	3593 C3	3613 C3	4505 C4	4525 C2	7203 B2
2209 B2	2562 D4	2595 D4	3551 A4	3576 D4	3594 D2	3614 C3	4506 C4	4528 A2	7552 D3
2210 C2	2563 C4	2596 D2	3552 B1	3577 C4	3595 B4	3617 D5	4507 C3	4529 B3	7553 D3
2211 B2	2564 D4	2597 C5	3553 B1	3578 D4	3596 D2	3618 A2	4508 C3	4530 D2	7554 D2
2212 B2	2565 C4	2598 C5	3554 A3	3579 C4	3597 C3	3619 C3	4509 D3	4531 A3	7555 B3
2545 C4	2574 B4	2601 B4	3555 A3	3580 D4	3598 D2	3620 D5	4510 D3	4532 A4	7556 D2
2546 D2	2575 B4	2602 B4	3556 A4	3581 D3	3599 C4	3621 D5	4511 D2	5200 B2	7557 C4
2547 A3	2576 D4	3200 B2	3557 A4	3582 D3	3600 D3	3622 A4	4512 C1	6210 B2	7558 D4
2548 A4	2577 C4	3201 B2	3558 A1	3583 C4	3601 C4	3623 A4	4513 A3	6211 C2	7559 B3
2551 C4	2581 B5	3202 C2	3559 B1	3584 D3	3602 D3	3626 B6	4514 C3	6212 C2	7560 C2
2552 D3	2582 B5	3203 C1	3562 D5	3585 C3	3603 C3	3628 B6	4515 A1	6213 C2	
2553 D5	2583 B5	3204 B2	3563 C5	3586 D3	3604 D3	3630 A4	4518 A2	6214 C2	
2554 D5	2586 D4	3205 B2	3564 D3	3587 D4	3605 D5	3631 A5	4519 A1	6550 B5	





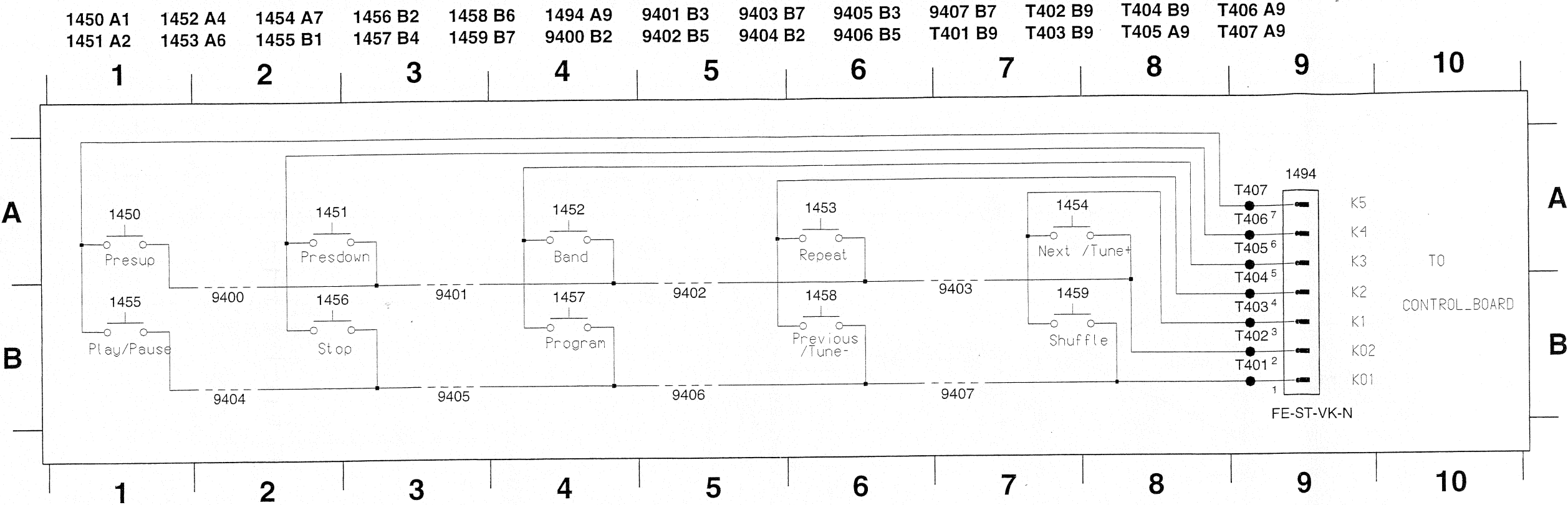
- F01 C1
- F02 C1
- F03 B3
- F04 B3
- F05 D9
- F06 B9
- F07 B10
- F08 C8
- 0001 A7
- 0002 B7
- 0003 C7
- 1009 B4
- 1011 A9
- 1012 A10
- 1014 B1
- 1015 D10
- 1022 B3
- 1023 B9
- 2028 B1
- 2029 B2
- 2030 C3
- 2031 D1
- 2032 D2
- 6004 C1
- 6005 C2
- 6006 C1
- 6007 C2
- 9001 A8
- 9002 C9
- 9004 A3



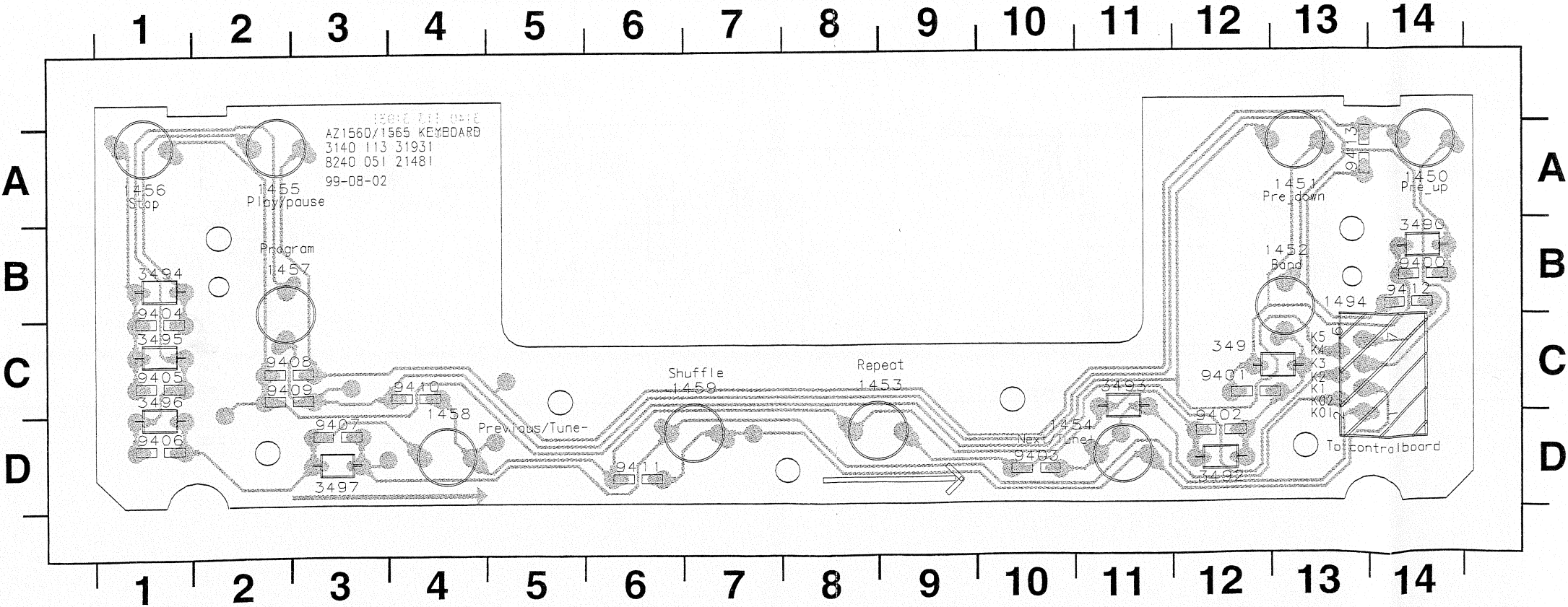
- 0001 E4
- 0002 E5
- 0003 E6
- 1009 A7
- 1011 E5
- 1012 D3
- 1014 A2
- 1015 A3
- 1022 B6
- 1023 C9
- 2028 B3
- 2029 A3
- 2030 A5
- 2031 B4
- 2032 A4
- 6004 C3
- 6005 B3
- 6006 C4
- 6007 B4
- 9001 F4
- 9002 B9
- 9003 B2
- 9004 A6

12-1
KEYBOARD - CIRCUIT & LAYOUT DIAGRAM

12-1



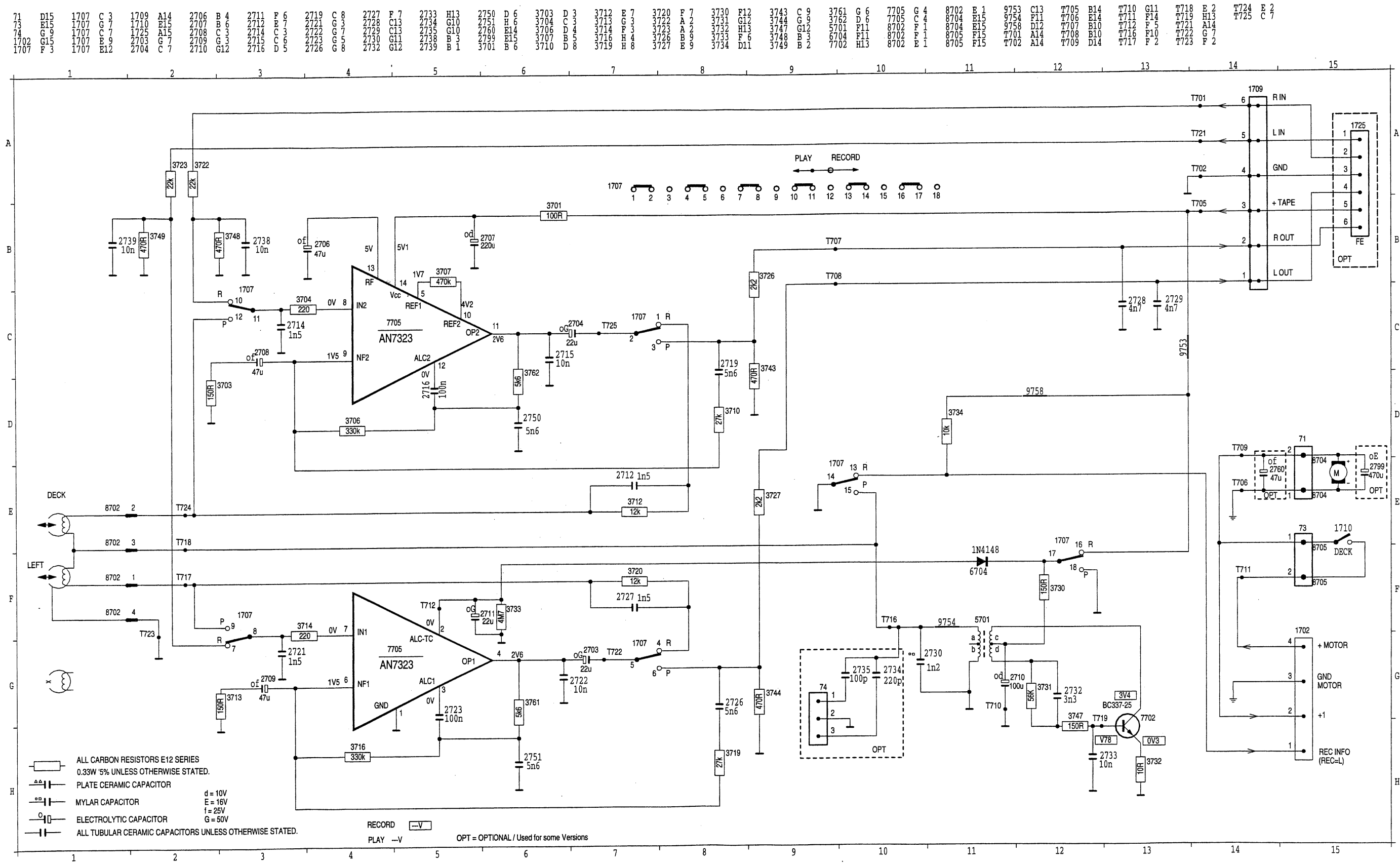
1450 A14 1453 C8 1456 A1 1459 C7 3491 C12 3494 B1 3497 D3 9402 D12 9405 C1 9408 C2 9411 D6
1451 A13 1454 D10 1457 B2 1494 B13 3492 D12 3495 C1 9400 B14 9403 D10 9406 D1 9409 C2 9412 B14
1452 B13 1455 A2 1458 C4 3490 B14 3493 C11 3496 C1 9401 C12 9404 B1 9407 D3 9410 C4 9413 A13

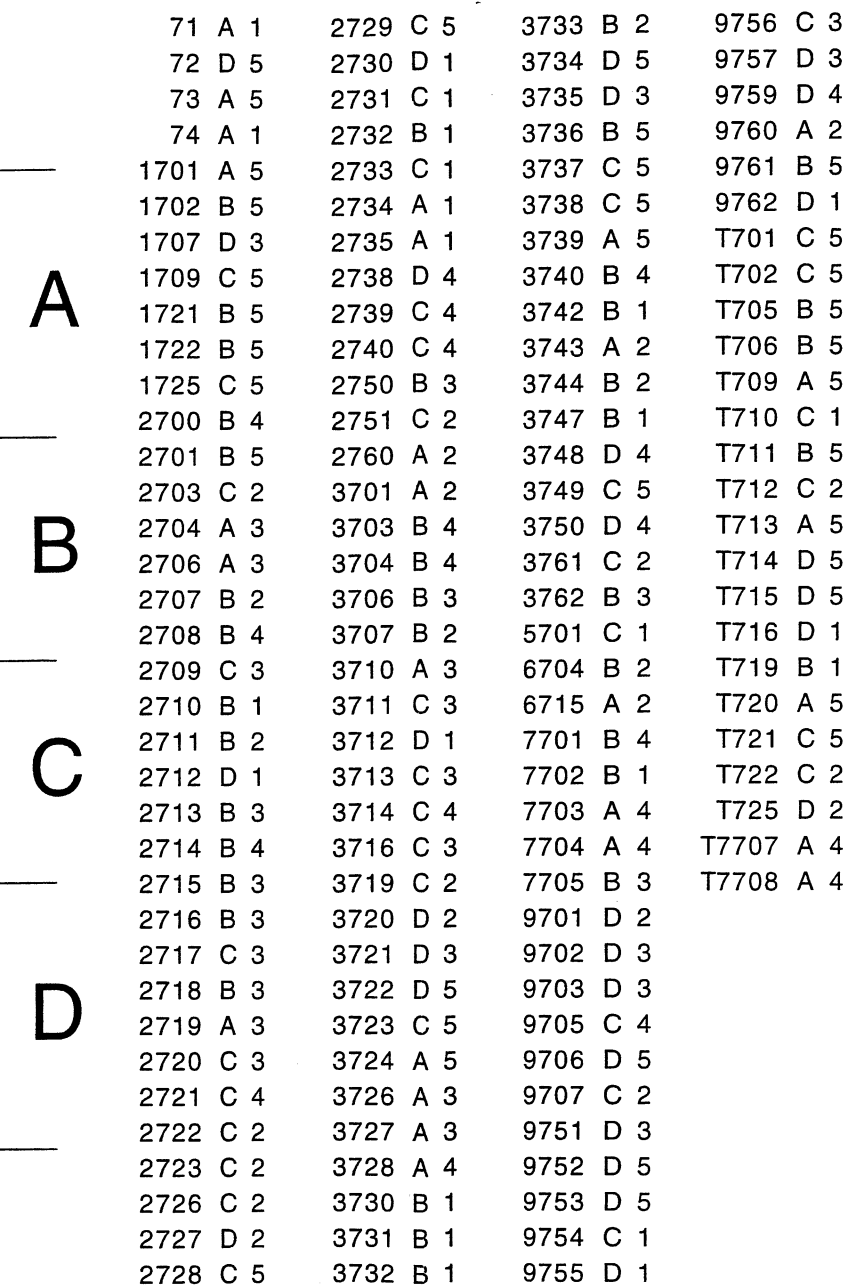


RECORDER BOARD - CIRCUIT DIAGRAM

13-1

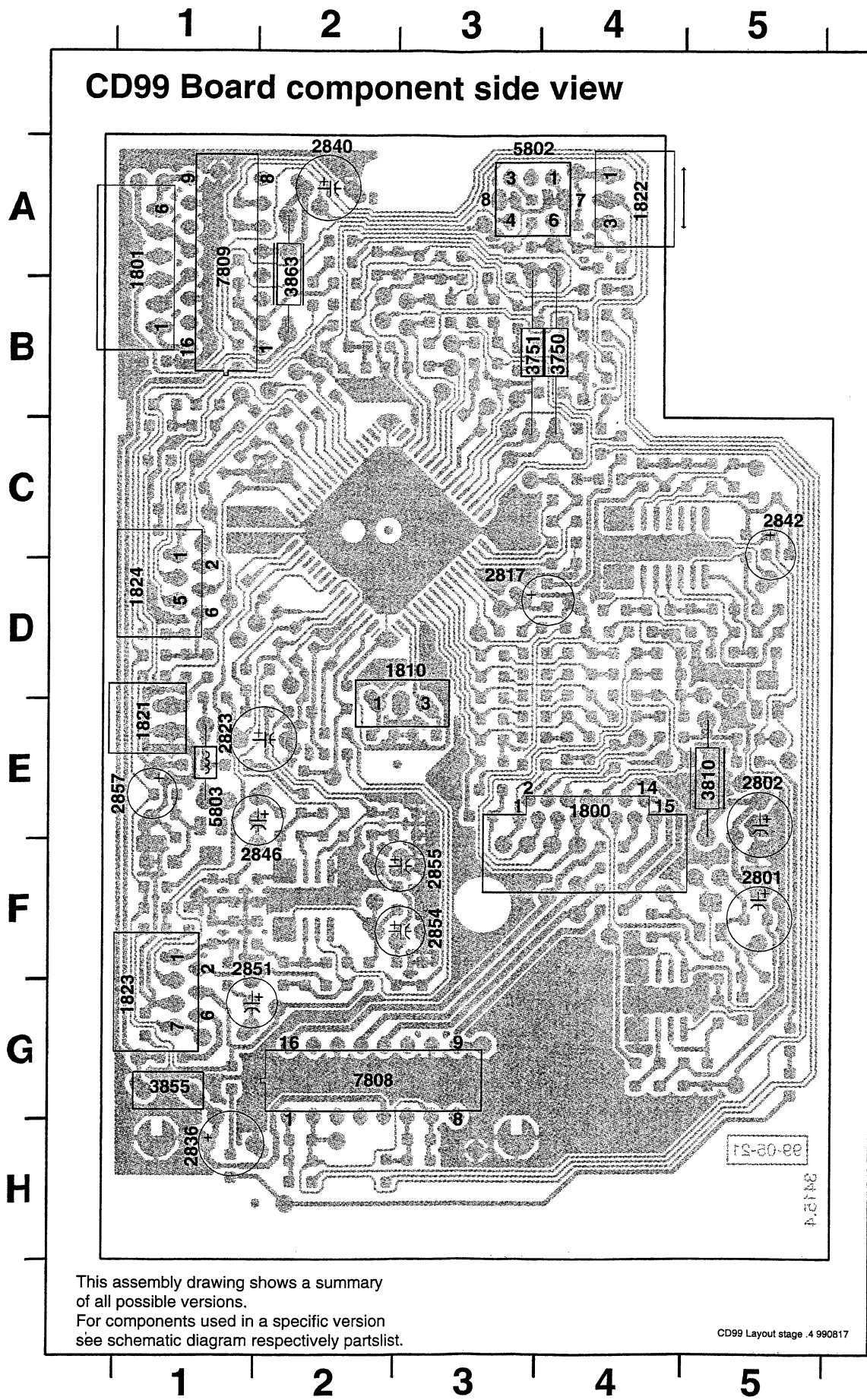
13-1





Adjustment	Cassette	SK	Deck 1	Measure on	Read on	Adjust with	Adjust to
Azimuth	10 kHz SBC420*	Tape	Play	H/P Jack	mV meter	Left hand Screw R/P head	max.
Motor Speed	3150 kHz SBC420*	Tape	Play	H/P Jack	Wow and flutter meter	Preset in motor	**a

****a** The maximum permissible speed deviation is $\pm 3\%$.
Moreover, the wow and flutter value can be read.



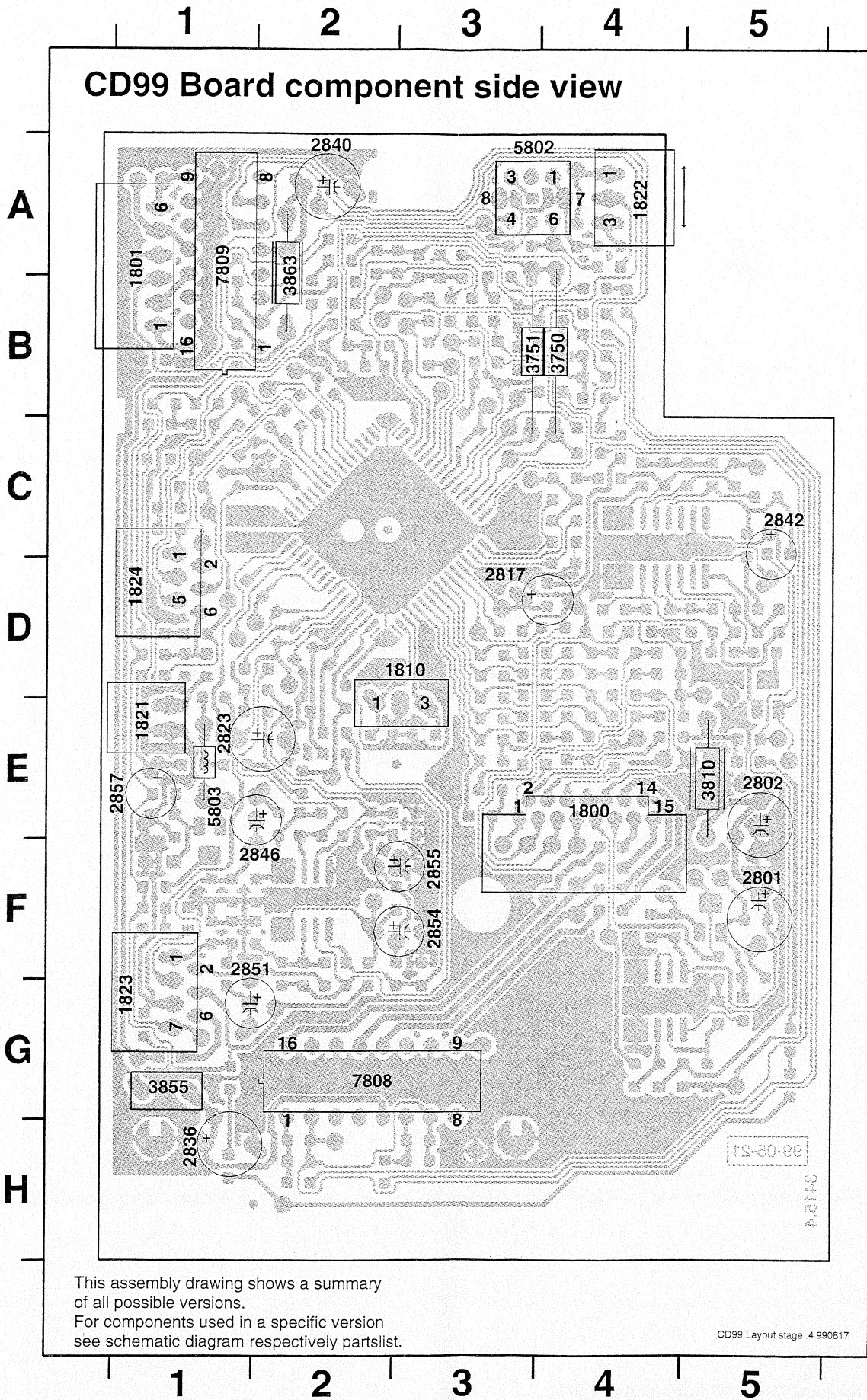


71 A 1	2729 C 5	3733 B 2	9756 C 3
72 D 5	2730 D 1	3734 D 5	9757 D 3
73 A 5	2731 C 1	3735 D 3	9759 D 4
74 A 1	2732 B 1	3736 B 5	9760 A 2
1701 A 5	2733 C 1	3737 C 5	9761 B 5
1702 B 5	2734 A 1	3738 C 5	9762 D 1
1707 D 3	2735 A 1	3739 A 5	T701 C 5
1709 C 5	2738 D 4	3740 B 4	T702 C 5
1721 B 5	2739 C 4	3742 B 1	T705 B 5
1722 B 5	2740 C 4	3743 A 2	T706 B 5
1725 C 5	2750 B 3	3744 B 2	T709 A 5
2700 B 4	2751 C 2	3747 B 1	T710 C 1
2701 B 5	2760 A 2	3748 D 4	T711 B 5
2703 C 2	3701 A 2	3749 C 5	T712 C 2
2704 A 3	3703 B 4	3750 D 4	T713 A 5
2706 A 3	3704 B 4	3761 C 2	T714 D 5
2707 B 2	3706 B 3	3762 B 3	T715 D 5
2708 B 4	3707 B 2	5701 C 1	T716 D 1
2709 C 3	3710 A 3	6704 B 2	T719 B 1
2710 B 1	3711 C 3	6715 A 2	T720 A 5
2711 B 2	3712 D 1	7701 B 4	T721 C 5
2712 D 1	3713 C 3	7702 B 1	T722 C 2
2713 B 3	3714 C 4	7703 A 4	T725 D 2
2714 B 4	3716 C 3	7704 A 4	T7707 A 4
2715 B 3	3719 C 2	7705 B 3	T7708 A 4
2716 B 3	3720 D 2	9701 D 2	
2717 C 3	3721 D 3	9702 D 3	
2718 B 3	3722 D 5	9703 D 3	
2719 A 3	3723 C 5	9705 C 4	
2720 C 3	3724 A 5	9706 D 5	
2721 C 4	3726 A 3	9707 C 2	
2722 C 2	3727 A 3	9751 D 3	
2723 C 2	3728 A 4	9752 D 5	
2726 C 2	3730 B 1	9753 D 5	
2727 D 2	3731 B 1	9754 C 1	
2728 C 5	3732 B 1	9755 D 1	

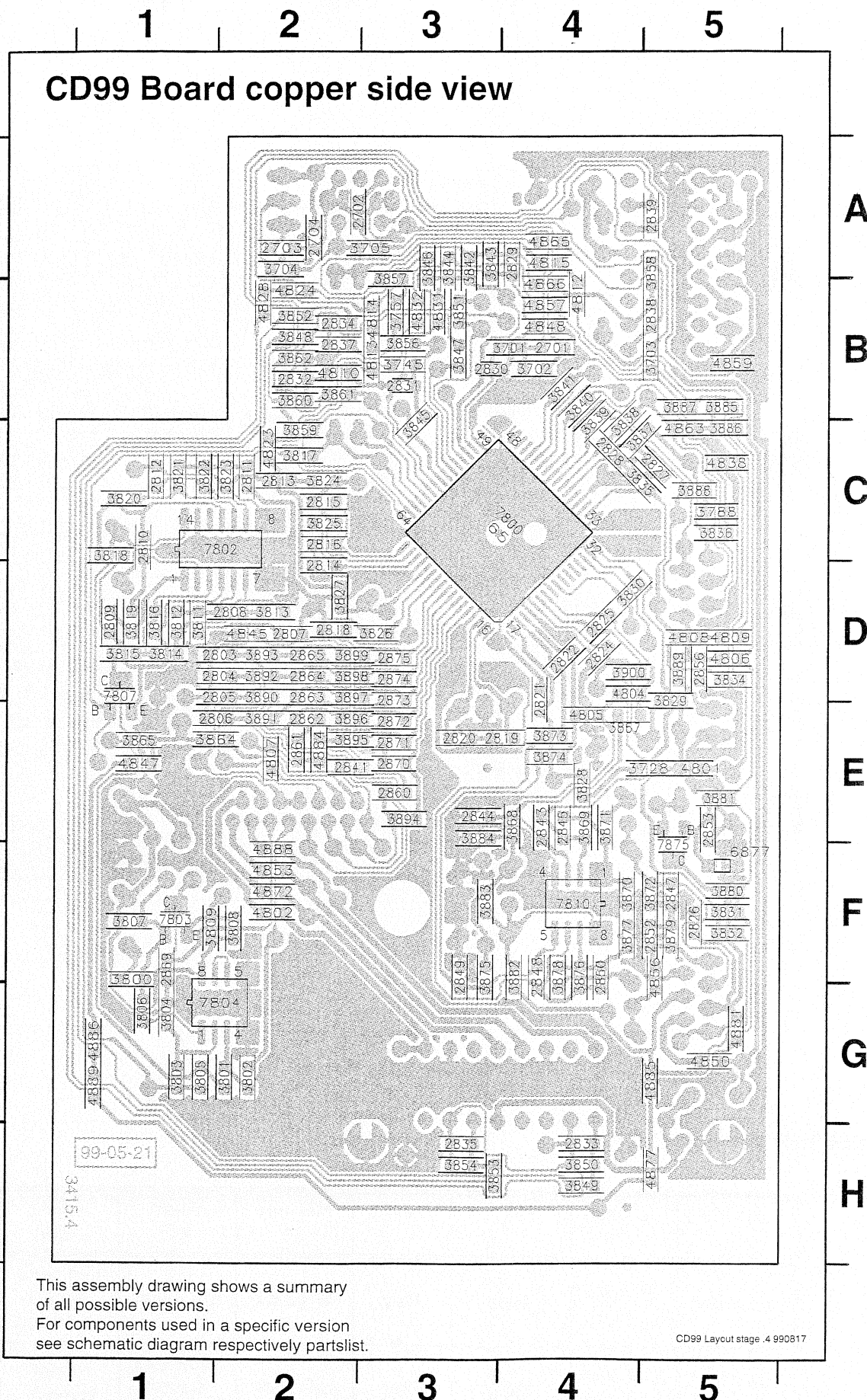
1 2 3 4 5

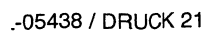
Adjustment	Cassette	SK	Deck 1	Measure on	Read on	Adjust with	Adjust to
Azimuth	10 kHz SBC420*	Tape	Play	H/P Jack	mV meter	Left hand Screw R/P head	max.
Motor Speed	3150 kHz SBC420*	Tape	Play	H/P Jack	Wow and flutter meter	Preset in motor	**a

****a** The maximum permissible speed deviation is $\pm 3\%$.
Moreover, the wow and flutter value can be read.

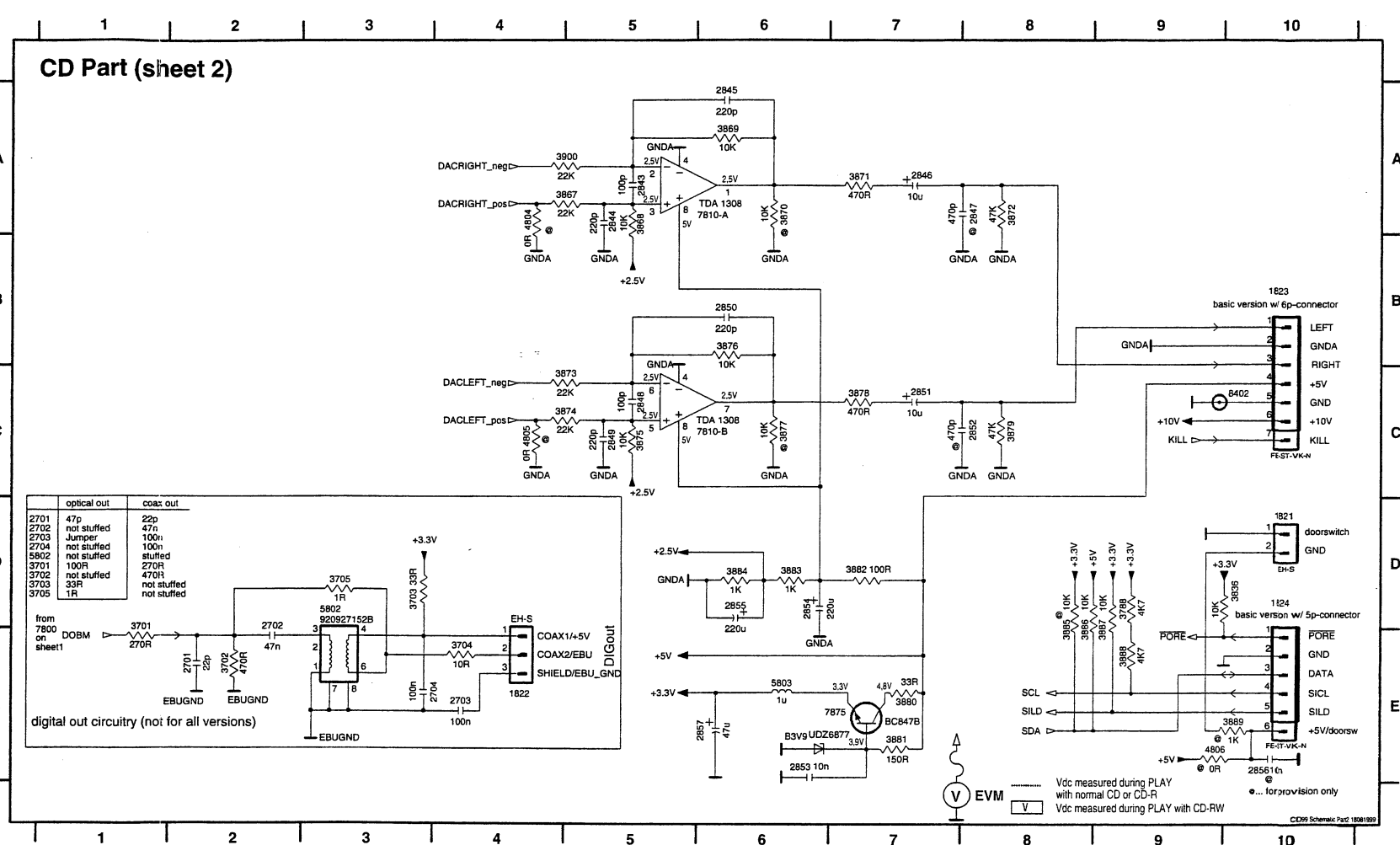
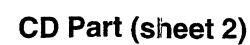


1800	F2	3703	B5	3876	F4
1801	A5	3704	A2	3877	F4
1810	D3	3705	A3	3878	F4
1821	E5	3728	E5	3879	F5
1822	A2	3745	B3	3880	F5
1823	G5	3750	B2	3881	E5
1824	D5	3751	B2	3882	F4
2701	B4	3757	B3	3883	F3
2702	A2	3788	C5	3884	E3
2703	A2	3800	F1	3885	B5
2704	A2	3801	G2	3886	C5
2801	F1	3802	G2	3887	B5
2802	E1	3803	G1	3888	C5
2803	D2	3804	G1	3889	D5
2804	D2	3805	G1	3890	D2
2805	D2	3806	G1	3891	E2
2806	E1	3807	F1	3892	D2
2807	D2	3808	F2	3893	D2
2808	D2	3809	F1	3894	E3
2809	D1	3810	E1	3895	E2
2810	C1	3811	D1	3896	E2
2811	C2	3812	D1	3897	D2
2812	C1	3813	D2	3898	D2
2813	C2	3814	D1	3899	D2
2814	D2	3815	D1	3900	D4
2815	C2	3816	D1	4801	E5
2816	C2	3817	C2	4802	F2
2817	D2	3818	C1	4804	D4
2818	D2	3819	D1	4805	E4
2819	E4	3820	C1	4806	D5
2820	C1	3821	C1	4807	E2
2821	D4	3822	C1	4808	D5
2822	D4	3823	C2	4809	D5
2823	E4	3824	C2	4810	B2
2824	D4	3825	C2	4812	B4
2825	D4	3826	D3	4813	B3
2826	F5	3827	D2	4814	B3
2827	C5	3828	E4	4815	A4
2828	C4	3829	D5	4823	C2
2829	A4	3830	D4	4824	B2
2830	B3	3831	F5	4828	B2
2831	B3	3832	F5	4831	B3
2832	B2	3834	D5	4832	B3
2833	H4	3835	C4	4838	C5
2834	B2	3836	C5	4845	D2
2835	H3	3837	C4	4847	E1
2836	G5	3838	C4	4848	B4
2837	B2	3839	C4	4850	G5
2838	B5	3840	B4	4853	F2
2839	A5	3841	B4	4856	F5
2840	A4	3842	A3	4857	B4
2841	E2	3843	A3	4859	B5
2842	C1	3844	A3	4863	C5
2843	E4	3845	C3	4865	A4
2844	E3	3846	A3	4866	B4
2845	E4	3847	B3	4872	F2
2846	E4	3848	B2	4877	H5
2847	F5	3849	H4	4881	G5
2848	F4	3850	H4	4884	E2
2849	F3	3851	B3	4885	G5
2850	F4	3852	B2	4886	G1
2851	G4	3853	H3	4888	F2
2852	F5	3854	H3	4889	G1
2853	E5	3855	G5	5802	A2
2854	F3	3856	B3	5803	E5
2855	E3	3857	B3	6877	F5
2856	D5	3858	A5	7800	C4
2857	E5	3859	C2	7802	C2
2860	E3	3860	B2	7803	F1
2861	E2	3861	B2	7804	G2
2862	E2	3862	B2	7807	D1
2863	D2	3863	A4	7808	G4
2864	D2	3864	E1	7809	A5
2865	D2	3865	E1	7810	F4
2869	F1	3867	E4	7875	F5
2870	E3	3868	E4	8401	H3
2871	E3	3869	E4	8402	H5
2872	E3	3870	F4		
2873	D3	3871	E4		
2874	D3	3872	F5		
2875	D3	3873	E4		
3701	B4	3874	E4		
3702	B4	3875	F3		





1821 D10	2702 E2	2845 A6	2850 B6	2855 D6	3703 D3	3867 A5	3872 A8	3877 C6	3882 D7	3887 E9	4805 C4	7810-A A5
1822 E4	2703 E4	2846 A7	2851 C7	2856 E10	3704 E4	3868 A5	3873 C5	3878 C7	3883 D6	3888 E9	4806 E9	7810-B C5
1823 B10	2704 E8	2847 A8	2852 C8	2857 E6	3705 D3	3869 A6	3874 C5	3879 C8	3884 D6	3889 E10	5802 D3	7875 E7
1824 D10	2843 A5	2848 C5	2853 E6	3701 E1	3788 E9	3870 A6	3875 C5	3880 E7	3885 E8	3900 A5	5803 E6	8402 C9
2701 E2	2844 A5	2849 C5	2854 D6	3702 E2	3836 D10	3871 A7	3876 B6	3881 E7	3886 E8	4404 A4	6877 E7	



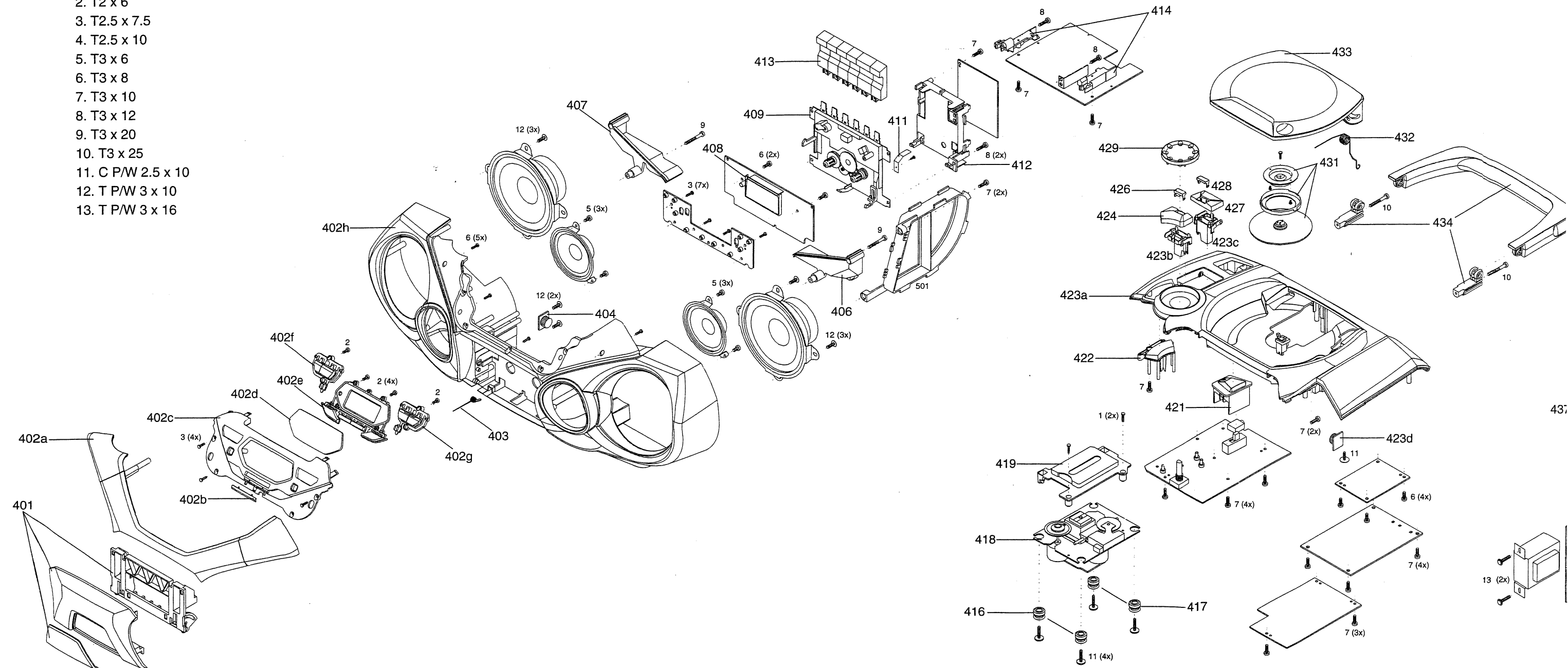
EXPLODED VIEW DIAGRAM (AZ1570) - CABINET

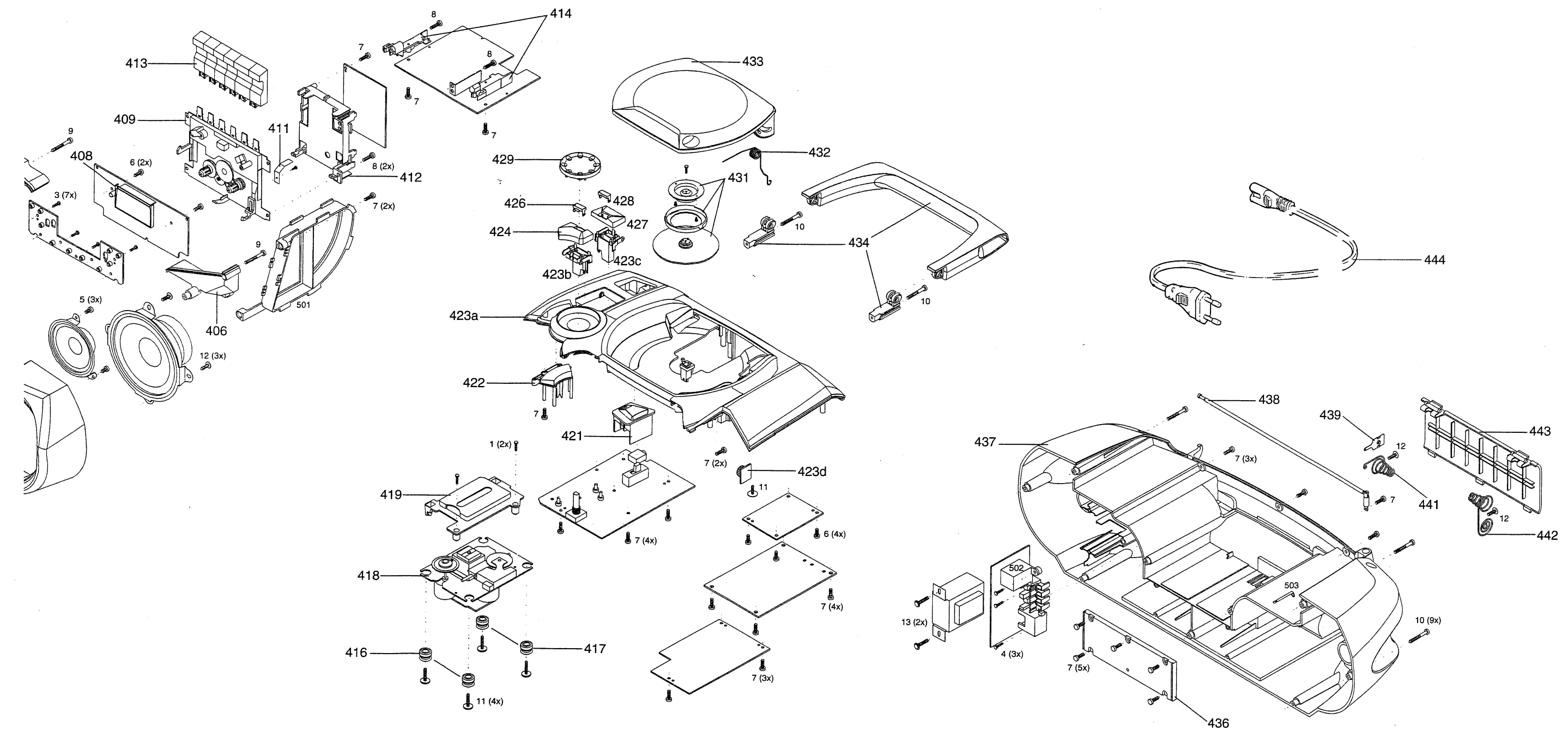
15-1

15-1

SCREW LIST :

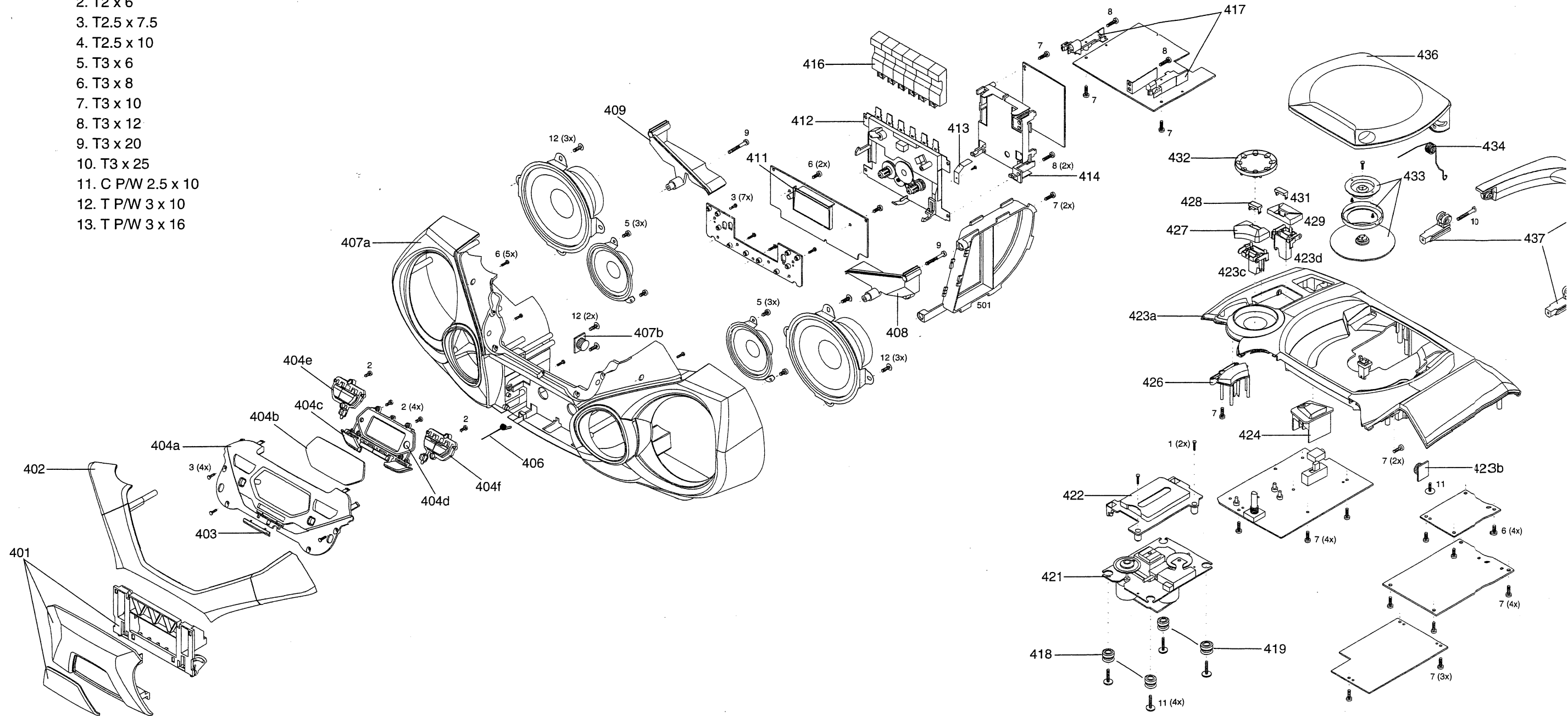
- 1. C M2 x 10
- 2. T2 x 6
- 3. T2.5 x 7.5
- 4. T2.5 x 10
- 5. T3 x 6
- 6. T3 x 8
- 7. T3 x 10
- 8. T3 x 12
- 9. T3 x 20
- 10. T3 x 25
- 11. C P/W 2.5 x 10
- 12. T P/W 3 x 10
- 13. T P/W 3 x 16





SCREW LIST :

1. C M2 x 10
2. T2 x 6
3. T2.5 x 7.5
4. T2.5 x 10
5. T3 x 6
6. T3 x 8
7. T3 x 10
8. T3 x 12
9. T3 x 20
10. T3 x 25
11. C P/W 2.5 x 10
12. T P/W 3 x 10
13. T P/W 3 x 16



ELECTRICAL PARTSLIST - CD99 DA11¹⁶⁻¹

- CAPACITORS -

2801	482212441751	47µF 20% 50V
2802	482212441751	47µF 20% 50V
2803	482212613695	82pF 1% NP0 63V
2804	482212613695	82pF 1% NP0 63V
2805	482212613695	82pF 1% NP0 63V
2806	482212613695	82pF 1% NP0 63V
2807	482212613691	27pF 1% NP0 63V
2808	532212233538	150pF 2% NP0 63V
2809	482212613691	27pF 1% NP0 63V
2810	482212613691	27pF 1% NP0 63V
2811	532212232659	33pF 5% 50V
2812	532212232448	10pF 5% NP0 63V
2813	482212233127	2,2nF 10% X7R 63V
2814	482212613751	47nF 10% X7R 63V
2815	482212613692	47pF 1% NP0 63V
2816	532212232654	22nF 10% X7R 63V
2817	482212440769	4,7µF 20% 100V
2818	482212613751	47nF 10% X7R 63V
2821	482212614585	100nF 10% X7R 50V
2822	482212613344	1,5nF 5% 63V
2823	482212442383	220µF 20% 4V
2824	482212613751	47nF 10% X7R 63V
2825	482212613344	1,5nF 5% 63V
2826	482212613751	47nF 10% X7R 63V
2827	532212231647	1nF 10% X7R 63V
2828	482212613692	47pF 1% NP0 63V
2829	482212613751	47nF 10% X7R 63V
2830	482212614043	1µF +80-20% Y5V 16V
2831	482212614043	1µF +80-20% Y5V 16V
2832	532212233538	150pF 2% NP0 63V
2833	532212232268	470pF 10% 50V
2834	482212233216	270pF 5% NP0 50V
2835	532212232268	470pF 10% 50V
2836	482212441751	47µF 20% 50V
2837	482212613751	47nF 10% X7R 63V
2838	532212232654	22nF 10% X7R 63V
2839	482212614585	100nF 10% X7R 50V
2840	482212441751	47µF 20% 50V
2841	482212613751	47nF 10% X7R 63V
2842	482212421913	1µF 20% 63V
2843	532212232531	100pF 5% NP0 50V
2844	482212233575	220pF 5% NP0 63V
2845	482212233575	220pF 5% NP0 63V
2846	482212440248	10µF 20% 63V
2848	532212232531	100pF 5% NP0 50V
2849	482212233575	220pF 5% NP0 63V
2850	482212233575	220pF 5% NP0 63V
2851	482212440248	10µF 20% 63V
2853	482212233177	10nF 20% X7R 50V
2854	482212411912	220µF 20% 6,3V

- CAPACITORS -

2855	482212411912	220µF 20% 6,3V
2857	482212412362	47µF 4V 20%
2860	532211680853	560pF 5% NP0 63V
2861	532212231865	1,5nF 10% X7R 63V
2862	482212610326	180pF 5%NP0 63V
2863	482212610326	180pF 5%NP0 63V
2864	482212610326	180pF 5%NP0 63V
2865	482212610326	180pF 5%NP0 63V
2869	482212613751	47nF 10% X7R 63V
2870	482212233575	220pF 5% NP0 63V
2871	482212233575	220pF 5% NP0 63V
2872	482212233575	220pF 5% NP0 63V
2873	482212233575	220pF 5% NP0 63V
2874	482212233575	220pF 5% NP0 63V
2875	482212233575	220pF 5% NP0 63V
3728	482205120479	47R 5% 0,1W
3745	482205120109	10R 5% 0,1W
3757	482205120223	22K 5% 0,1W
3788	482205120472	4K7 5% 0,1W
3800	482205120478	4R70 5% 0,1W
3801	482205120154	150K 5% 0,1W
3802	482205110102	1K 2% 0,25W
3803	482205120273	27K 5% 0,1W
3804	482205120472	4K7 5% 0,1W
3805	482205120273	27K 5% 0,1W
3806	482211710361	680R 1% 0,1W
3807	482211711139	1K5 1% 0,1W
3808	482205120339	33R 5% 0,1W
3809	482205120339	33R 5% 0,1W
3810	482205210478	4R7 5% 0,33W
3811	482205110102	1K 2% 0,25W
3812	482205120474	470K 5% 0,1W
3813	482205120683	68K 5% 0,1W
3814	482205120332	3K3 5% 0,1W
3815	482205120472	4K7 5% 0,1W
3816	482211683933	15K 1% 0,1W
3817	482211710834	47K 1% 0,1W
3818	482205120562	5K6 5% 0,1W
3819	482211683933	15K 1% 0,1W
3820	482211710965	18K 1% 0,1W
3821	482205120332	3K3 5% 0,1W
3822	482205120332	3K3 5% 0,1W
3823	482205120332	3K3 5% 0,1W
3824	482205110102	1K 2% 0,25W
3825	482205120223	22K 5% 0,1W

- RESISTORS -

ELECTRICAL PARTSLIST - CD99 DA11¹⁶⁻¹

- RESISTORS -

3826	482205120273	27K 5% 0,1W
3827	482205120339	33R 5% 0,1W
3828	482205120479	47R 5% 0,1W
3829	482205120101	100R 5% 0,1W
3830	482205120472	4K7 5% 0,1W
3835	482205120223	22K 5% 0,1W
3836	482211710833	10K 1% 0,1W
3837	482205120471	470R 5% 0,1W
3838	482205120471	470R 5% 0,1W
3839	482205120471	470R 5% 0,1W
3840	482205120471	470R 5% 0,1W
3841	482205120472	4K7 5% 0,1W
3842	482205110102	1K 2% 0,25W
3843	482205110102	1K 2% 0,25W
3844	482205120101	100R 5% 0,1W
3845	482205120228	2R2 5% 0,1W
3846	482205120223	22K 5% 0,1W
3847	482211711149	82K 1% 0,1W
3848	482211710834	47K 1% 0,1W
3849	482211711148	56K 1% 0,1W
3850	482205120822	8K2 5% 0,1W
3851	482211711148	56K 1% 0,1W
3852	482211710834	47K 1% 0,1W
3853	482211683933	15K 1% 0,1W
3854	482205120822	8K2 5% 0,1W
3855	482211640227	4R6 25% 12V
3856	482205120683	68K 5% 0,1W
3857	482205120683	68K 5% 0,1W
3858	482205120392	3K9 5% 0,1W
3859	482211710834	47K 1% 0,1W
3860	482205110102	1K 2% 0,25W
3861	482211710834	47K 1% 0,1W
3862	482205110102	1K 2% 0,25W
3863	482205210338	3R3 5% 0,33W
3864	482211710833	10K 1% 0,1W
3865	482205110102	1K 2% 0,25W
3867	482205120223	22K 5% 0,1W
3868	482211710833	10K 1% 0,1W
3869	482211710833	10K 1% 0,1W
3871	482205120471	470R 5% 0,1W
3872	482211710834	47K 1% 0,1W
3873	482205120223	22K 5% 0,1W
3874	482205120223	22K 5% 0,1W
3875	482211710833	10K 1% 0,1W
3876	482211710833	10K 1% 0,1W
3878	482205120471	470R 5% 0,1W
3879	482211710834	47K 1% 0,1W
3880	482205120339	33R 5% 0,1W
3881	482211710353	150R 1% 0,1W
3882	482205120101	100R 5% 0,1W

- RESISTORS -

3883	482205110102	1K 2% 0,25W
3884	482205110102	1K 2% 0,25W
3886	482211710833	10K 1% 0,1W
3887	482211710833	10K 1% 0,1W
3888	482205120472	4K7 5% 0,1W
3889	482205110102	1K 2% 0,25W
3890	482211710837	100K 1% 0,1W
3891	482211710837	100K 1% 0,1W
3892	482211710837	100K 1% 0,1W
3893	482211710837	100K 1% 0,1W
3894	482211710833	10K 1% 0,1W
3895	482211710833	10K 1% 0,1W
3896	482211710833	10K 1% 0,1W
3897	482211710833	10K 1% 0,1W
3898	482211710833	10K 1% 0,1W
3899	482211710833	10K 1% 0,1W
3900	482205120223	22K 5% 0,1W
4801	482205120008	Jumper
4802	482205120008	Jumper
4807	482205120008	Jumper
4808	482205120008	Jumper
4809	482205120008	Jumper
4810	482205120008	Jumper
4812	482205120008	Jumper
4813	482205120008	Jumper
4814	482205120008	Jumper
4815	482205120008	Jumper
4823	482205120008	Jumper
4824	482205120008	Jumper
4828	482205120008	Jumper
4831	482205120008	Jumper
4832	482205120008	Jumper
4838	482205120008	Jumper
4845	482205120008	Jumper
4847	482205120008	Jumper
4848	482205120008	Jumper
4850	482205120008	Jumper
4853	482205120008	Jumper
4856	482205120008	Jumper
4857	482205120008	Jumper
4859	482205120008	Jumper
4863	482205120008	Jumper
4865	482205120008	Jumper
4866	482205120008	Jumper
4872	482205120008	Jumper
4877	482205120008	Jumper
4881	482205120008	Jumper
4884	482205120008	Jumper
4885	482205120008	Jumper
4886	482205120008	Jumper

ELECTRIC

- RESISTORS

4888	482211710833	10K 1% 0,1W
4889	482211710833	10K 1% 0,1W
1810	482211710833	10K 1% 0,1W
5803	482211710833	10K 1% 0,1W
6877	482211710833	10K 1% 0,1W
7800	482211710833	10K 1% 0,1W
7802	532212233575	220pF 5% NP0 63V
7803	532212233575	220pF 5% NP0 63V
7804	532212233575	220pF 5% NP0 63V
7807	532212233575	220pF 5% NP0 63V
7808	482211710833	10K 1% 0,1W
7809	482211710833	10K 1% 0,1W
7810	482211710833	10K 1% 0,1W
7875	482211710833	10K 1% 0,1W
1800	482211710833	10K 1% 0,1W
1823	482211710833	10K 1% 0,1W
1824	482211710833	10K 1% 0,1W
8000	482211710833	10K 1% 0,1W
Note : Only the normal :		

- COILS & FIL

- DIODES -

- IC & TRANSI

- MISCELLANI

¹⁶⁻¹
ELECTRICAL PARTSLIST - CD99 DA11

- RESISTORS -

3826	482205120273	27K	5%	0,1W
3827	482205120339	33R	5%	0,1W
3828	482205120479	47R	5%	0,1W
3829	482205120101	100R	5%	0,1W
3830	482205120472	4K7	5%	0,1W
3835	482205120223	22K	5%	0,1W
3836	482211710833	10K	1%	0,1W
3837	482205120471	470R	5%	0,1W
3838	482205120471	470R	5%	0,1W
3839	482205120471	470R	5%	0,1W
3840	482205120471	470R	5%	0,1W
3841	482205120472	4K7	5%	0,1W
3842	482205110102	1K	2%	0,25W
3843	482205110102	1K	2%	0,25W
3844	482205120101	100R	5%	0,1W
3845	482205120228	2R2	5%	0,1W
3846	482205120223	22K	5%	0,1W
3847	482211711149	82K	1%	0,1W
3848	482211710834	47K	1%	0,1W
3849	482211711148	56K	1%	0,1W
3850	482205120822	8K2	5%	0,1W
3851	482211711148	56K	1%	0,1W
3852	482211710834	47K	1%	0,1W
3853	482211683933	15K	1%	0,1W
3854	482205120822	8K2	5%	0,1W
3855	482211640227	4R6	25%	12V
3856	482205120683	68K	5%	0,1W
3857	482205120683	68K	5%	0,1W
3858	482205120392	3K9	5%	0,1W
3859	482211710834	47K	1%	0,1W
3860	482205110102	1K	2%	0,25W
3861	482211710834	47K	1%	0,1W
3862	482205110102	1K	2%	0,25W
3863	482205210338	3R3	5%	0,33W
3864	482211710833	10K	1%	0,1W
3865	482205110102	1K	2%	0,25W
3867	482205120223	22K	5%	0,1W
3868	482211710833	10K	1%	0,1W
3869	482211710833	10K	1%	0,1W
3871	482205120471	470R	5%	0,1W
3872	482211710834	47K	1%	0,1W
3873	482205120223	22K	5%	0,1W
3874	482205120223	22K	5%	0,1W
3875	482211710833	10K	1%	0,1W
3876	482211710833	10K	1%	0,1W
3878	482205120471	470R	5%	0,1W
3879	482211710834	47K	1%	0,1W
3880	482205120339	33R	5%	0,1W
3881	482211710353	150R	1%	0,1W
3882	482205120101	100R	5%	0,1W

- RESISTORS -

3883	482205110102	1K	2%	0,25W
3884	482205110102	1K	2%	0,25W
3886	482211710833	10K	1%	0,1W
3887	482211710833	10K	1%	0,1W
3888	482205120472	4K7	5%	0,1W
3889	482205110102	1K	2%	0,25W
3890	482211710837	100K	1%	0,1W
3891	482211710837	100K	1%	0,1W
3892	482211710837	100K	1%	0,1W
3893	482211710837	100K	1%	0,1W
3894	482211710833	10K	1%	0,1W
3895	482211710833	10K	1%	0,1W
3896	482211710833	10K	1%	0,1W
3897	482211710833	10K	1%	0,1W
3898	482211710833	10K	1%	0,1W
3899	482211710833	10K	1%	0,1W
3900	482205120223	22K	5%	0,1W
4801	482205120008	Jumper		
4802	482205120008	Jumper		
4807	482205120008	Jumper		
4808	482205120008	Jumper		
4809	482205120008	Jumper		
4810	482205120008	Jumper		
4812	482205120008	Jumper		
4813	482205120008	Jumper		
4814	482205120008	Jumper		
4815	482205120008	Jumper		
4823	482205120008	Jumper		
4824	482205120008	Jumper		
4828	482205120008	Jumper		
4831	482205120008	Jumper		
4832	482205120008	Jumper		
4838	482205120008	Jumper		
4845	482205120008	Jumper		
4847	482205120008	Jumper		
4848	482205120008	Jumper		
4850	482205120008	Jumper		
4853	482205120008	Jumper		
4856	482205120008	Jumper		
4857	482205120008	Jumper		
4859	482205120008	Jumper		
4863	482205120008	Jumper		
4865	482205120008	Jumper		
4866	482205120008	Jumper		
4872	482205120008	Jumper		
4877	482205120008	Jumper		
4881	482205120008	Jumper		
4884	482205120008	Jumper		
4885	482205120008	Jumper		
4886	482205120008	Jumper		

¹⁶⁻¹
ELECTRICAL PARTSLIST - CD99 DA11

- RESISTORS -

4888	482205120008	Jumper
4889	482205120008	Jumper

- COILS & FILTERS -

1810	482224273557	Filter CST8,46MTW-TF01
5803	482215711231	Coil LAN02TB1R0J

- DIODES -

6877	482213011564	Diode UDZ3.9B
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- IC & TRANSISTORS -

7800	482220917324	IC SAA7325H
7802	532220911517	IC PC74HCU04T
7803	532213060123	Trans BC807-40
7804	532220982941	IC LM358D
7807	532213042755	Trans BC847C

7808	482220932852	IC TDA7073A/N2
7809	482220932852	IC TDA7073A/N2
7810	482220933165	IC TDA1308T/N1
7875	482213060511	Trans BC847B

- MISCELLANEOUS -

1800	482226510925	Connector 15P
1823	482226511207	Connector 6P
1824	482226511207	Connector 6P
8000	482232012178	Flexible Foil 15P

Note : Only these parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - CONTROL BOARD

- CAPACITORS -				- RESISTORS -			
2400	5322 126 10223	4,7nF 10% X7R	63V	3400	4822 051 20471	470R 5%	0,1W
2401	4822 126 14043	1µF +80-20% Y5V	16V	3401	4822 116 83933	15K 1%	0,1W
2402	4822 126 14585	100nF 10% X7R	50V	3402	4822 117 10837	100K 1%	0,1W
2403	5322 122 32531	100pF 5% NP0	50V	3403	4822 051 20472	4K7 5%	0,1W
2404	5322 122 32531	100pF 5% NP0	50V	3404	4822 117 10833	10K 1%	0,1W
2406	4822 126 14083	4µF 10V		3405	4822 117 12955	2K7 1%	0,1W
2407	5322 122 34099	470pF 10% X7R	63V	3406	4822 051 20223	22K 5%	0,1W
2408	4822 126 14491	2.2µF 10V		3407	4822 051 20223	22K 5%	0,1W
2409	5322 122 32531	100pF 5% NP0	50V	3408	4822 051 20223	22K 5%	0,1W
2411	5322 122 32531	100pF 5% NP0	50V	3409	4822 051 20223	22K 5%	0,1W
2412	5322 122 32531	100pF 5% NP0	50V	3410	4822 051 20223	22K 5%	0,1W
2413	4822 126 14043	1µF +80-20% Y5V	16V	3411	4822 051 20105	1M 5%	0,1W
2414	5322 122 32531	100pF 5% NP0	50V	3414	4822 117 11449	2K2 5%	0,1W
2415	5322 122 32531	100pF 5% NP0	50V	3415	4822 117 11449	2K2 5%	0,1W
2416	5322 122 32531	100pF 5% NP0	50V	3416	4822 051 20472	4K7 5%	0,1W
2417	5322 122 32531	100pF 5% NP0	50V	3417	4822 051 20472	4K7 5%	0,1W
2418	5322 122 32531	100pF 5% NP0	50V	3418	4822 051 20472	4K7 5%	0,1W
2419	5322 122 32531	100pF 5% NP0	50V	3419	4822 051 20472	4K7 5%	0,1W
2421	5322 122 31647	1nF 10% X7R	63V	3420	4822 051 20472	4K7 5%	0,1W
2422	4822 122 33575	220pF 5% NP0	63V	3421	4822 051 20105	1M 5%	0,1W
2423	5322 122 31647	1nF 10% X7R	63V	3422	4822 051 20332	3K3 5%	0,1W
2424	5322 122 32531	100pF 5% NP0	50V	3423	4822 051 20471	470R 5%	0,1W
2425	5322 122 32531	100pF 5% NP0	50V	3424	4822 051 20471	470R 5%	0,1W
2426	5322 122 32531	100pF 5% NP0	50V	3425	4822 051 20471	470R 5%	0,1W
2427	5322 122 32531	100pF 5% NP0	50V	3426	4822 051 20471	470R 5%	0,1W
2428	5322 122 32531	100pF 5% NP0	50V	3427	4822 051 20822	8K2 5%	0,1W
2429	5322 122 32531	100pF 5% NP0	50V	3428	4822 051 10102	1K 2%	0,25W
2430	4822 124 23432	100µF 20% 10V		3429	4822 051 20472	4K7 5%	0,1W
2431	5322 122 34099	470pF 10% X7R	63V	3430	4822 051 20472	4K7 5%	0,1W
2432	5322 122 32531	100pF 5% NP0	50V	3431	4822 117 10834	47K 1%	0,1W
2433	5322 122 32531	100pF 5% NP0	50V	3432	4822 117 10834	47K 1%	0,1W
2434	5322 122 34099	470pF 10% X7R	63V	3433	4822 117 11449	2K2 5%	0,1W
2435	5322 122 32531	100pF 5% NP0	50V	3434	4822 117 11449	2K2 5%	0,1W
2436	4822 122 33177	10nF 20% X7R	50V	3437	4822 051 10102	1K 2%	0,25W
2437	5322 122 32531	100pF 5% NP0	50V	3438	4822 051 10102	1K 2%	0,25W
2438	5322 122 32531	100pF 5% NP0	50V	3439	4822 051 10102	1K 2%	0,25W
2439	5322 122 32531	100pF 5% NP0	50V	3440	4822 051 10102	1K 2%	0,25W
2440	5322 122 32531	100pF 5% NP0	50V	3441	4822 051 10102	1K 2%	0,25W
2441	5322 122 32531	100pF 5% NP0	50V	3442	4822 051 20472	4K7 5%	0,1W
2442	5322 122 32531	100pF 5% NP0	50V	3443	4822 051 10102	1K 2%	0,25W
2444	4822 126 13689	18pF 1% NP0	63V	3444	4822 051 20472	4K7 5%	0,1W
				3445	4822 051 20472	4K7 5%	0,1W
				3446	4822 051 20472	4K7 5%	0,1W
				3447	4822 051 20822	8K2 5%	0,1W
				3448	4822 117 11449	2K2 5%	0,1W

ELECTRICAL PARTSLIST - CONTROL BOARD

- RESISTORS -				- RESISTORS -			
3449	4822 051 10102	1K 2%	0,25W	4407	4822 051 20008	Jumper	
3452	4822 117 11449	2K2 5%	0,1W	4408	4822 051 20008	Jumper	
3453	4822 117 11449	2K2 5%	0,1W	4409	4822 051 20008	Jumper	
3454	4822 051 10102	1K 2%	0,25W	4410	4822 051 20008	Jumper	
3455	4822 051 20101	100R 5%	0,1W	4411	4822 051 20008	Jumper	
3456	4822 117 10833	10K 1%	0,1W	4412	4822 051 20008	Jumper	
3457	4822 117 11503	220R 1%	0,1W	4413	4822 051 20008	Jumper	
3460	4822 051 20223	22K 5%	0,1W	4414	4822 051 20008	Jumper	
3461	4822 051 20223	22K 5%	0,1W	4415	4822 051 20008	Jumper	
3462	4822 051 20223	22K 5%	0,1W	4416	4822 051 20008	Jumper	
3463	4822 051 20101	100R 5%	0,1W	4417	4822 051 20008	Jumper	
3464	4822 051 20182	1K8 5%	0,1W	4418	4822 051 20008	Jumper	
3465	4822 051 20561	560R 5%	0,1W	4419	4822 051 20008	Jumper	
3466	4822 051 20223	22K 5%	0,1W	4420	4822 051 20008	Jumper	
3467	4822 051 20223	22K 5%	0,1W	4421	4822 051 20008	Jumper	
3468	4822 051 20101	100R 5%	0,1W	4422	4822 051 20008	Jumper	
3469	4822 051 20223	22K 5%	0,1W	- COILS -			
3470	4822 051 20223	22K 5%	0,1W	5400	4822 157 62552	Coil 2,2µH	
3471	4822 051 20223	22K 5%	0,1W	5401	2422 535 94279	Ind Fxd 100µH 5%	
3472	4822 051 20223	22K 5%	0,1W	- DIODES -			
3473	4822 051 20223	22K 5%	0,1W	6400	4822 130 11411	Diode BZX284-C3V3	
3474	4822 051 20472	4K7 5%	0,1W	6401	5322 130 34337	Diode BAV99	
3475	4822 051 20223	22K 5%	0,1W	6403	4822 130 83059	LED TLUR4400	
3477	4822 051 20223	22K 5%	0,1W	- IC & TRANSISTORS -			
3478	4822 051 20223	22K 5%	0,1W	7400	3140 110 50860	IC TMP87CK20AF	
3479	4822 051 20223	22K 5%	0,1W	7410	5322 130 60159	Trans BC846B	
3480	4822 051 20223	22K 5%	0,1W	7411	5322 130 60159	Trans BC846B	
3482	4822 117 10833	10K 1%	0,1W	7412	9965 000 04931	IC M24C01-WMN6	
3483	4822 051 20105	1M 5%	0,1W	7413	3140 110 50730	LCD Display WK-TP5238-RH-B	
3484	4822 051 20333	33K 5%	0,1W	7413	3140 110 50720	LCD Display LE-06153AP	
3485	4822 117 11454	820R 1%	0,1W	7414	9322 155 82667	IR Receiver TSOP2236	
3487	4822 051 20124	120K 5%	0,1W	7415	5322 130 60159	Trans BC846B	
3488	4822 051 20109	10R 5%	0,1W	7416	5322 130 60159	Trans BC846B	
3489	4822 051 20333	33K 5%	0,1W	7417	4822 130 60373	Trans BC856B	
3490	4822 051 20472	4K7 5%	0,1W	- MISCELLANEOUS -			
3498	4822 051 20105	1M 5%	0,1W	1400	2422 540 98455	Crystal 4MHz	
3533	4822 051 20101	100R 5%	0,1W	1490	4822 265 11207	Connector 6P	
3534	4822 051 20008	Jumper		1491	4822 267 10956	Connector 7P	
3535	4822 051 20223	22K 5%	0,1W	1492	4822 267 10756	Connector 13P	
3536	4822 051 20223	22K 5%	0,1W	1493	4822 267 10956	Connector 7P	
4402	4822 051 20008	Jumper		Note: Only these parts mentioned in the list are normal service parts.			
4403	4822 051 20008	Jumper					
4404	4822 051 20008	Jumper					
4405	4822 051 20008	Jumper					
4406	4822 051 20008	Jumper					

Note: Only these parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - TUNER BOARD ECO6

- CAPACTORS -

2101	4822 126 13692	47pF 1% NP0 63V
2103	5322 122 31647	1nF 10% X7R 63V
2104	5322 122 32531	100pF 5% NP0 50V
2106	2020 800 00204	Var Cap 4,2pF-20pF 100V
2107	4822 121 51319	1µF 10% 63V
2108	5322 122 32531	100pF 5% NP0 50V
2109	5322 122 32448	10pF 5% NP0 63V
2120	5322 122 32658	22pF 5% 50V
2122	4822 122 33891	3,3nF 10% X7R 63V
2123	2238 861 18391	390pF 1% NP0 50V
2125	2020 552 96199	560pF 1% 50V
2126	5322 122 31863	330pF 5% NP0 63V
2127	4822 126 14076	220nF 80/20% 25V
2128	4822 124 40248	10µF 20% 63V
2129	4822 124 41584	100µF 20% 10V
2130	4822 126 13482	470nF 80/20% 16V
2131	4822 126 13482	470nF 80/20% 16V
2132	4822 126 13482	470nF 80/20% 16V
2133	4822 124 21913	1µF 20% 63V
2134	4822 126 13188	15nF 5% X7R 63V
2135	4822 126 13188	15nF 5% X7R 63V
2136	4822 126 14076	220nF 80/20% 25V
2137	4822 126 14076	220nF 80/20% 25V
2138	4822 124 22652	2,2µF 20% 50V
2139	4822 126 14236	15pF 5% 50V
2140	4822 126 13695	82pF 1% NP0 63V
2141	4822 126 13838	100nF 80/20% Y5V 50V
2144	4822 126 13482	470nF 80/20% 16V
2145	4822 122 33575	220pF 5% NP0 63V
2146	4822 122 33575	220pF 5% NP0 63V
2147	4822 122 33575	220pF 5% NP0 63V
2148	4822 122 33127	2,2nF 10% X7R 63V
2150	4822 126 13838	100nF 80/20% Y5V 50V
2152	4822 126 12105	33nF 5% X7R 50V
2153	4822 126 13486	15pF 2% NP0 63V
2155	2020 800 00191	Var Cap 3pF-11pF 100V
2159	5322 122 32659	33pF 5% 50V
2163	4822 126 13838	100nF 80/20% Y5V 50V
2164	4822 126 13482	470nF 80/20% 16V
2165	4822 126 13838	100nF 80/20% Y5V 50V
2166	5322 122 31647	1nF 10% X7R 63V
2167	4822 122 33926	12pF 50V
2186	4822 124 40196	220µF 20% 16V
2187	4822 122 33177	10nF 20% X7R 50V
2188	4822 122 33177	10nF 20% X7R 50V
2189	4822 126 14076	220nF 80/20% 25V
2190	4822 124 81151	Electrolytic 22µF 50V
2191	4822 124 81151	Electrolytic 22µF 50V
2192	5322 122 31647	1nF 10% X7R 63V
2193	5322 122 31647	1nF 10% X7R 63V

- CAPACTORS -

2194	5322 122 31647	1nF 10% X7R 63V
2195	4822 124 81151	22µF 50V
2196	4822 122 33177	10nF 20% X7R 50V
2197	4822 122 33177	10nF 20% X7R 50V

- RESISTORS -

3101	4822 051 20333	33K 5% 0,1W
3102	4822 117 10837	100K 1% 0,1W
3103	4822 051 20822	8K2 5% 0,1W
3104	4822 117 13577	330R 1% 1,25W
3105	4822 117 11503	220R 1% 0,1W
3108	4822 117 11449	2K2 1% 0,1W
3109	4822 117 11449	2K2 1% 0,1W
3123	4822 051 20472	4K7 5% 0,1W
3125	4822 117 10833	10K 1% 0,1W
3128	4822 117 11449	2K2 1% 0,1W
3132	4822 051 20479	47R 5% 0,1W
3134	4822 051 20223	22K 5% 0,1W
3137	4822 116 83933	15K 1% 0,1W
3141	4822 117 11148	56K 1% 0,1W
3142	4822 100 12159	100K 30%
3145	4822 117 11449	2K2 1% 0,1W
3152	4822 051 20471	470R 5% 0,1W
3153	4822 051 20471	470R 5% 0,1W
3155	4822 051 20479	47R 5% 0,1W
3158	4822 051 20471	470R 5% 0,1W
3159	4822 051 20471	470R 5% 0,1W
3160	4822 051 20471	470R 5% 0,1W
3161	4822 051 20223	22K 5% 0,1W
3166	4822 051 20479	47R 5% 0,1W
3167	4822 051 20479	47R 5% 0,1W
3169	4822 051 20154	150K 5% 0,1W
3180	4822 117 10833	10K 1% 0,1W
3186	4822 117 11448	180R 1% 0,1W
3187	4822 051 10102	1K 2% 0,25W
3188	4822 117 11449	2K2 1% 0,1W
3189	4822 051 20223	22K 5% 0,1W
3190	4822 117 10833	10K 1% 0,1W
3191	4822 051 20472	4K7 5% 0,1W
3192	4822 051 20105	1M 5% 0,1W
3193	4822 117 11449	2K2 1% 0,1W
3194	4822 117 10837	100K 1% 0,1W
3195	4822 051 20474	470K 5% 0,1W
3196	4822 117 10833	10K 1% 0,1W
4102	4822 051 20334	330K 5% 0,1W
4105	4822 051 20008	Jumper
4107	4822 051 20008	Jumper
4108	4822 051 20008	Jumper
4110	4822 051 20008	Jumper

ELECTRICAL PARTSLIST - TUNER BOARD ECO6

- COILS & FILTERS -

5102	4822 157 71634	MW Aerial
5103	2422 549 44107	Ind Var 252kHz
5109	4822 242 70665	Filter SFE10,7MS3-A
5110	4822 242 70665	Filter SFE10,7MS3-A
5111	2422 549 44023	Ind Var 450kHz
5112	4822 157 70302	Coil F7MCS-12216N
5114	4822 157 70302	Coil F7MCS-12216N
5119	4822 157 11443	Coil 2,4µH
5121	4822 242 10261	CrystalT 75kHz
5122	2422 549 44108	Ind Var 796kHz
5123	2422 549 44108	Ind Var 796kHz
5130	4822 157 11843	Coil MD7B-01F
5131	4822 157 11843	Coil MD7B-01F

- DIODES -

6103	5322 130 34337	Diode BAV99
6105	4822 130 83075	Diode HN1V02H-B
6120	4822 130 83757	Diode BAS216
6130	4822 130 82833	Diode1SV228
6131	4822 130 82833	Diode1SV228
6181	5322 130 34337	Diode BAV99
6182	4822 130 83757	Diode BAS216
6183	9340 386 90115	Diode BZX284-C11

- IC & TRANSISTORS -

7101	9351 740 80557	IC SM TEA5757H/V1
7102	4822 130 42131	Trans BF550
7104	4822 130 40855	Trans BC337
7105	4822 130 40855	Trans BC337
7109	4822 130 60373	Trans BC856B
7122	5322 130 42755	Trans BC847C
7124	5322 130 42755	Trans BC847C
7180	4822 130 60373	Trans BC856B
7181	5322 130 42755	Trans BC847C
7182	5322 130 42755	Trans BC847C
7183	5322 130 42755	Trans BC847C

- MISCELLANEOUS -

1121	4822 267 10733	Connector 4P
1122	4822 267 10954	Connector 5P

Note: Only these parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - AF BOARD

- CAPACITORS -

2000	482212480144	220µF 20% 25V
2001	482212614107	330nF +-80/20% Y5V 25V
2002	482212232646	5,6nF 10%X7R 50V
2003	482212614107	330nF +-80/20% Y5V 25V
2004	482212441407	0,47µF 20% 63V
2005	482212232535	680pF 10%X7R 63V
2006	482212233127	2,2nF 10%X7R 63V
2007	482212440433	47µF 20% 25V
2008	482212480791	470µF 16V 20%
2009	223891019852	150nF +-80/20% Y5V 25V
2010	482212440433	47µF 20% 25V
2011	482212441407	0,47µF 20% 63V
2013	223891019852	150nF +-80/20% Y5V 25V
2015	482212411767	470µF 20% 25V
2016	482212440207	100µF 20% 25V
2017	482212232646	5,6nF 10%X7R 50V
2018	482212232535	680pF 10%X7R 63V
2019	482212233127	2,2nF 10%X7R 63V
2020	482212440433	47µF 20% 25V
2021	482212440433	47µF 20% 25V
2022	482212480791	470µF 16V 20%
2023	482212440433	47µF 20% 25V
2025	482212411878	4700µF 16V
2026	482212441407	0,47µF 20% 63V
2027	482212440207	100µF 20% 25V
2031	482212613692	47pF 1% NP0 63V
2032	482212613692	47pF 1% NP0 63V
2033	482212480195	470µF 20% 10V
2034	482212480195	470µF 20% 10V
2035	482212440433	47µF 20% 25V
2036	482212422652	2,2µF 20% 50V
2037	482212422652	2,2µF 20% 50V
2038	482212233127	2,2nF 10%X7R 63V
2039	482212233127	2,2nF 10%X7R 63V
2128	482212441407	0,47µF 20% 63V
2131	482212233127	2,2nF 10%X7R 63V

- RESISTORS -

3000	482211711383	12K 1% 0,1W
3001	482211711449	2K2 1% 0,1W
3002	482205120223	22K 5% 0,1W
3003	482205120223	22K 5% 0,1W
3004	482211711449	2K2 1% 0,1W
3005	482211711449	2K2 1% 0,1W
3007	482205120822	8K2 5% 0,1W
3008	482205120471	470R 5% 0,1W
3009	482211711503	220R 1% 0,1W
3010	482211711449	2K2 1% 0,1W

- RESISTORS -

3011	482211710833	10K 1% 0,1W
3012	482205120121	120R 5% 0,1W
3014	482205120121	120R 5% 0,1W
3015	482205120109	10R 5% 0,1W
3016	482205120822	8K2 5% 0,1W
3017	482205120471	470R 5% 0,1W
3018	482211711449	2K2 1% 0,1W
3019	482211711503	220R 1% 0,1W
3020	482211710833	10K 1% 0,1W
3021	482205120479	47R 5% 0,1W
3022	482211711152	4R7 5%
3023	212010892668	3R3 5%
3024	212010892668	3R3 5%
3025	482211711503	220R 1% 0,1W
3026	482205120471	470R 5% 0,1W
3028	482205120478	4K7 5% 0,1W
3029	482205110102	1K 2% 0,25W
3030	482205120471	470R 5% 0,1W
3031	482205120472	4K7 5% 0,1W
3032	482205120471	470R 5% 0,1W
3033	482211711503	220R 1% 0,1W
3034	482211711507	6K8 1% 0,1W
3035	482211711507	6K8 1% 0,1W
3036	482211710833	10K 1% 0,1W
3038	482205120472	4K7 5% 0,1W
3039	482205120472	4K7 5% 0,1W
3040	482205110102	1K 2% 0,25W
3041	482205110102	1K 2% 0,25W
9020	482205120008	Jumper

- DIODE -

6001	482213083757	Diode BAS216
6002	482213083757	Diode BAS216
6003	482213083757	Diode BAS216
6008	482213011411	Diode BZX284-C3V3
6010	482213083757	Diode BAS216

- IC & TRANSISTORS -

7000	482213040959	Trans BC547B
7001	932213777682	IC TDA7449
7002	482213040981	Trans BC337-25
7004	482220931544	IC TA8227P
7005	482213040981	Trans BC337-25

ELECTRICAL PARTSLIST - AF BOARD

- IC & TRANSISTORS -

7006	482213040981	Trans BC337-25
7007	482213040981	Trans BC337-25
7008	482213041246	Trans BC327-25
7009	482213044568	Trans BC557B
7010	482213040959	Trans BC547B
7106	482213044568	Trans BC557B

- MISCELLANEOUS -

1000	482226711039	Connector 11P
1005	482226710953	Connector 7P

Note: Only these parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - FEATURE BOARD

- CAPACITORS -

2545	4822 122 33127	2,2nF 10% X7R 63V
2546	4822 122 33127	2,2nF 10% X7R 63V
2547	5322 122 31866	6,8nF 10% X7R 63V
2548	5322 122 31866	6,8nF 10% X7R 63V
2549	4822 121 51252	470nF 5% 63V

2550	4822 121 51252	470nF 5% 63V
2551	5322 122 31865	1,5nF 10% X7R 63V
2552	5322 122 31865	1,5nF 10% X7R 63V
2553	4822 122 32535	680pF 10% X7R 63V
2554	4822 122 32535	680pF 10% X7R 63V

2556	4822 126 14585	100nF 10% X7R 50V
2557	4822 126 14585	100nF 10% X7R 50V
2558	4822 126 13695	82pF 1% NP0 63V
2559	4822 126 13695	82pF 1% NP0 63V
2560	4822 122 33177	10nF 20% X7R 50V

2561	4822 122 33177	10nF 20% X7R 50V
2562	5322 122 31865	1,5nF10% X7R 63V
2563	5322 122 31865	1,5nF10% X7R 63V
2564	4822 122 33575	220pF 5% NP0 63V
2565	4822 122 33575	220pF 5% NP0 63V

2566	5322 121 42386	100nF 5% 63V
2567	5322 121 42386	100nF 5% 63V
2568	5322 121 42489	33F 5% 250V
2569	5322 121 42489	33F 5% 250V
2570	5322 121 42386	100nF 5% 63V

2571	5322 121 42386	100nF 5% 63V
2572	5322 121 42489	33nF 5% 250V
2573	5322 121 42489	33nF 5% 250V
2574	4822 126 13188	15nF 5% X7R 63V
2575	4822 126 13188	15nF 5% X7R 63V

2576	4822 126 13692	47pF 1% NP0 63V
2577	4822 126 13692	47pF 1% NP0 63V
2578	4822 124 41796	22µF 20% 16V
2579	4822 124 81151	22µF 50V
2580	4822 124 81151	22µF 50V

2581	5322 126 10223	4,7nF 10% X7R 63V
2582	5322 126 10223	4,7nF 10% X7R 63V
2583	5322 126 10223	4,7nF 10% X7R 63V
2584	4822 124 40196	220µF 20% 16V
2585	4822 124 41584	100µF 20% 10V

2586	5322 122 32654	22nF 10% X7R 63V
2587	5322 122 31647	1nF 10% X7R 63V
2588	5322 122 31647	1nF 10% X7R 63V
2589	4822 122 33177	10nF 20% X7R 50V
2590	4822 122 33177	10nF 20% X7R 50V

2591	5322 122 31647	1nF 10% X7R 63V
2592	5322 122 31647	1nF 10% X7R 63V
2595	5322 122 31647	1nF 10% X7R 63V
2596	5322 122 31647	1nF 10% X7R 63V
2597	4822 122 33575	220pF 5% NP0 63V

- CAPACITORS -

2598	4822 122 33575	220pF 5% NP0 63V
2599	4822 124 23432	100µF 20% 10V

- RESISTORS -

3550	4822 117 10965	18K 1% 0,1W
3551	4822 117 10965	18K 1% 0,1W
3552	4822 051 10102	1K 2% 0,25W
3553	4822 051 10102	1K 2% 0,25W
3554	4822 051 20562	5K6 5% 0,1W

3555	4822 051 20562	5K6 5% 0,1W
3556	4822 117 13579	220K 1% 0,1W
3557	4822 117 13579	220K 1% 0,1W
3558	4822 117 10837	100K 1% 0,1W
3559	4822 117 10837	100K 1% 0,1W

3562	4822 116 83933	15K 1% 0,1W
3563	4822 116 83933	15K 1% 0,1W
3564	4822 051 20273	27K 5% 0,1W
3565	4822 051 20273	27K 5% 0,1W
3566	4822 117 11149	82K 1% 0,1W

3567	4822 117 11149	82K 1% 0,1W
3573	4822 051 20683	68K 5% 0,1W
3574	4822 051 20683	68K 5% 0,1W
3575	4822 116 83933	15K 1% 0,1W
3576	4822 116 83933	15K 1% 0,1W

3577	4822 051 20333	33K 5% 0,1W
3578	4822 051 20333	33K 5% 0,1W
3579	4822 117 10837	100K 1% 0,1W
3580	4822 117 10837	100K 1% 0,1W
3581	4822 117 13579	220K 1% 0,1W

3582	4822 117 13579	220K 1% 0,1W
3583	4822 051 20333	33K 5% 0,1W
3584	4822 051 20333	33K 5% 0,1W
3585	4822 051 20333	33K 5% 0,1W
3586	4822 051 20333	33K 5% 0,1W

3587	4822 117 13579	220K 1% 0,1W
3588	4822 117 13579	220K 1% 0,1W
3589	4822 117 10965	18K 1% 0,1W
3590	4822 117 10965	18K 1% 0,1W
3591	4822 051 20154	150K 5% 0,1W

3592	4822 051 20154	150K 5% 0,1W
3593	4822 051 20683	68K 5% 0,1W
3594	4822 051 20683	68K 5% 0,1W
3595	4822 117 11149	82K 1% 0,1W
3596	4822 117 11149	82K 1% 0,1W

3597	4822 051 20822	8K2 5% 0,1W
3598	4822 051 20822	8K2 5% 0,1W
3599	4822 051 20154	150K 5% 0,1W
3600	4822 051 20154	150K 5% 0,1W
3601	4822 051 20333	33K 5% 0,1W

ELECTRICAL PARTSLIST - FEATURE BOARD

- RESISTORS -

3602	4822 051 20333	33K 5% 0,1W
3603	4822 051 20333	33K 5% 0,1W
3604	4822 051 20333	33K 5% 0,1W
3605	4822 117 11454	820R 1% 0,1W
3608	4822 116 83933	15K 1% 0,1W

3609	4822 116 83933	15K 1% 0,1W
3610	4822 116 83933	15K 1% 0,1W
3611	4822 117 10834	47K 1% 0,1W
3612	4822 117 12521	68R 1% 0,1W
3613	4822 117 10833	10K 1% 0,1W

3614	4822 051 20479	47R 5% 0,1W
3617	4822 051 20101	100R 5% 0,1W
3620	4822 117 10834	47K 1% 0,1W
3621	4822 117 10834	47K 1% 0,1W
3622	4822 051 20472	4K7 5% 0,1W

3623	4822 051 20472	4K7 5% 0,1W
3626	4822 117 10833	10K 1% 0,1W
3628	4822 117 10833	10K 1% 0,1W
3630	4822 051 20339	33R 5% 0,1W
3631	4822 051 20008	Jumper

4500	4822 051 20008	Jumper
4501	4822 051 20008	Jumper
4502	4822 051 20008	Jumper
4503	4822 051 20008	Jumper
4504	4822 051 20008	Jumper

4505	4822 051 20008	Jumper
4506	4822 051 20008	Jumper
4507	4822 051 20008	Jumper
4508	4822 051 20008	Jumper
4509	4822 051 20008	Jumper

4510	4822 051 20008	Jumper
4511	4822 051 20008	Jumper
4513	4822 051 20008	Jumper
4514	4822 051 20008	Jumper
4515	4822 051 20008	Jumper

4518	4822 051 20008	Jumper
4519	4822 051 20008	Jumper
4520	4822 051 20008	Jumper
4521	4822 051 20008	Jumper
4522	4822 051 20008	Jumper

4523	4822 051 20008	Jumper
4524	4822 051 20008	Jumper
4525	4822 051 20008	Jumper
4528	4822 051 20008	Jumper
4529	4822 051 20008	Jumper

4530	4822 051 20008	Jumper
4531	4822 051 20008	Jumper

- COIL -

5200	4822 157 10586	2,2µH 10%
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- DIODES -

6550	4822 130 83757	Diode BAS216
6551	4822 130 83757	Diode BAS216
6552	4822 130 83757	Diode BAS216
6553	9322 033 20682	LED VS TLHG4405
6554	9322 146 69682	LED VS TLHO4400

6555	4822 130 31878	Diode 1N4003G
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- IC & TRANSISTORS -

7200	4822 130 60373	Trans BC856B
7552	5322 130 60159	Trans BC846B
7553	5322 130 60159	Trans BC846B
7554	5322 130 60159	Trans BC846B
7555	5322 130 60159	Trans BC846B

7556	5322 130 60159	Trans BC846B
7557	5322 130 60159	Trans BC846B
7558	5322 209 14482	IC HEF4069UBT
7559	5322 130 60159	Trans BC846B
7560	4822 130 60373	Trans BC856B

- MISCELLANEOUS -

1250	4822 267 10958	Connector 5P
1251	4822 265 11183	Connector 4P
1501	2422 026 05076	Connector 1P
1504	4822 267 10756	Connector 13P
1551	4822 277 11846	Slide Switch

1552	2422 128 02922	Push Switch
1553	2422 128 02922	Push Switch
1554	2422 128 02922	Push Switch
1555	4822 273 10366	Rotary Switch
1625	4822 265 11207	Connector 6P

1801	4822 265 11207	Connector 6P
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Note: Only these parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - RECORDER BOARD

- CAPACITORS -

2703	482212481151	22µF	50V
2704	482212481151	22µF	50V
2706	482212440433	47µF	20% 25V
2707	482212440196	220µF	20% 16V
2708	482212440433	47µF	20% 25V
2709	482212440433	47µF	20% 25V
2710	482212441584	100µF	20% 10V
2711	482212481151	22µF	50V
2712	482212612878	1,5nF	10% 16V
2714	482212612878	1,5nF	10% 16V

2715	482212151387	10nF	20% 16V
2716	482212612882	100nF	+80-20% 50V
2719	482212613098	5,6nF	20% 16V
2721	482212612878	1,5nF	10% 16V
2722	482212151387	10nF	20% 16V

2723	482212612882	100nF	+80-20% 50V
2726	482212613098	5,6nF	20% 16V
2727	482212612878	1,5nF	10% 16V
2728	482212611714	4,7nF	20%
2729	482212611714	4,7nF	20%

2730	202030090561	1,2nF	10%
2732	482212210577	3,3nF	10% 16V
2733	482212151387	10nF	20% 16V
2738	482212151387	10nF	20% 16V
2739	482212151387	10nF	20% 16V

2750	482212613098	5,6nF	20% 16V
2751	482212613098	5,6nF	20% 16V

- RESISTORS -

3701	482211652175	100R	5%	0,5W
3703	482211683868	150R	5%	0,5W
3704	482211683872	220R	5%	0,5W
3706	482211652272	330K	5%	0,5W
3707	482211652285	470K	5%	0,5W

3710	482211652264	27K	5%	0,5W
3712	482211652238	12K	5%	0,5W
3713	482211683868	150R	5%	0,5W
3714	482211683872	220R	5%	0,5W
3716	482211652272	330K	5%	0,5W

3719	482211652264	27K	5%	0,5W
3720	482211652238	12K	5%	0,5W
3722	482211652257	22K	5%	0,5W
3723	482211652257	22K	5%	0,5W
3726	482211652256	2K2	5%	0,5W

- RESISTORS -

3727	482211652256	2K2	5%	0,5W
3730	482211683868	150R	5%	0,5W
3731	482211652291	56K	5%	0,5W
3732	482211652176	10R	5%	0,5W
3733	482211130893	4M7	5%	0,2W
3734	482205021003	10K	1%	0,6W
3743	482211683883	470R	5%	0,5W
3744	482211683883	470R	5%	0,5W
3747	482211683868	150R	5%	0,5W
3748	482211683883	470R	5%	0,5W

3749	482211683883	470R	5%	0,5W
3761	482211652289	5K6	5%	0,5W
3762	482211652289	5K6	5%	0,5W

- COIL -

5701	482215710371	Coil	100kHz
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- DIODE -

6704	482213030621	Diode	1N4148
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- IC & TRANSISTORS -

7702	482213040981	Trans	BC337-25
7705	482220917498	IC	AN7323
1707	482227711504	Push	Switch

- MISCELLANEOUS -

1725	482226511207	Connector	6P
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Note : Only these parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - KEYBOARD

- MISCELLANEOUS -

1450	2422 128 02917	Tact Switch
1451	2422 128 02917	Tact Switch
1452	2422 128 02917	Tact Switch
1453	2422 128 02917	Tact Switch
1454	2422 128 02917	Tact Switch

1455	2422 128 02917	Tact Switch
1456	2422 128 02917	Tact Switch
1457	2422 128 02917	Tact Switch
1458	2422 128 02917	Tact Switch
1459	2422 128 02917	Tact Switch

1494	4822 267 10956	Connector	7P
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Note: Only these parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - POWER BOARD

- CAPACITORS -

2028	4822 122 33197	1nF	10%	50V
2029	4822 122 33197	1nF	10%	50V
2030	5322 121 42386	100nF	5%	63V
2031	4822 122 33197	1nF	10%	50V
2032	4822 122 33197	1nF	10%	50V

- DIODES -

6004	4822 130 31878	Diode	1N4003G
6005	4822 130 31878	Diode	1N4003G
6006	4822 130 31878	Diode	1N4003G
6007	4822 130 31878	Diode	1N4003G

- MISCELLANEOUS -

1010	△	4822 070 31602	Fuse	1.6A (Not for -/17)
1010	△	2422 086 10962	Fuse	2A (For -/17)
1011	△	4822 272 10366	Voltage Selector	(For -/01)
1012		4822 265 20287	Socket	Main (Not for -/17)
1012		4822 265 30986	Socket	Main (For -/17)

Note: Only these parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - MISCELLANEOUS

- CAPACITORS -

2129	2020 009 90099	4,7µF	20%	50V
2130	2020 009 90099	4,7µF	20%	50V

- MISCELLANEOUS -

1010	8240 008 80060	Loudspeaker	4" 4 Ohm
1011	8240 008 80060	Loudspeaker	4" 4 Ohm
1012	8240 008 80070	Loudspeaker	2.5" 8 Ohm
1013	8240 008 80070	Loudspeaker	2.5" 8 Ohm
1014	4822 276 13963	CD Door	Switch

1015	△	3140 118 32340	Transformer	(For -/00/05/10/13/14)
1015	△	3140 118 32350	Transformer	(For -/01/11)
1015	△	3140 118 32360	Transformer	(For -/17)
8100		3139 110 34860	FFC Foil	4P 340
8101		3139 110 34420	FFC Foil	5P 340

8400		3139 110 34500	FFC Foil	13P 140
8401		3139 110 34480	FFC Foil	7P 140
8402		3139 110 34470	FFC Foil	7P 08
8500		3139 110 34490	FFC Foil	11P 180
8625		4822 320 12243	Flex Cable	6P 18

8800		3139 110 34360	FFC Foil	6P 280
8801		3139 110 34360	FFC Foil	6P 280

Note: Only these parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - CONTROL BOARD**MISCELLANEOUS**

1402	4822 267 10756	FFC SOCKET 13P
1405	4822 265 11183	FFC SOCKET 4P
1406	4822 267 10956	FFC SOCKET 7P
1407	4822 265 11207	FFC SOCKET 6P
7400	9322 155 82667	IR RECEIVER TSOP2236

7401	3140 110 50730	LCD WK-TP5238-RH-B
8402	3139 110 36050	FFC FOIL 4P 80MM AD

CAPACITORS

2400	2020 552 96305	4,7uF +80-20% Y5V 10V
2401	4822 126 13883	220pF 5% 50V
2402	3198 016 31020	1nF 10% NP0 25V
2403	4822 126 13881	470pF 5% 50V
2405	4822 124 40433	47uF 20% 25V

2406	4822 122 31765	100pF 5% NP0 63V
2407	4822 122 31765	100pF 2% NP0 63V
2408	4822 122 31765	100pF 5% NP0 63V
2412	4822 122 31765	100pF 5% NP0 63V
2413	3198 017 41050	1uF 20% Y5V 10V

2414	4822 122 31765	100pF 5% NP0 63V
2415	4822 122 31765	100pF 5% NP0 63V
2416	5322 126 11583	10nF 10% X7R 50V
2417	4822 122 33752	15pF 5% NP0 50V
2418	4822 122 33752	15pF 5% NP0 50V

2419	4822 122 31765	100pF 5% NP0 63V
2420	4822 122 31765	100pF 5% NP0 63V
2421	4822 122 31765	100pF 5% NP0 63V
2422	4822 126 14305	100nF 10% X7R 16V
2423	4822 124 41584	100uF 20% 10V

2424	4822 122 33741	10pF 5% NP0 50V
2425	4822 122 33741	10pF 5% NP0 50V
2426	5322 126 11583	10nF 10% X7R 50V
2427	5322 126 11583	10nF 10% X7R 50V
2428	5322 126 11583	10nF 10% X7R 50V

2429	4822 122 31765	100pF 5% NP0 63V
2430	4822 122 31765	100pF 5% NP0 63V
2431	4822 122 31765	100pF 5% NP0 63V
2432	4822 122 31765	100pF 5% NP0 63V
2434	4822 126 14491	2.2uF 10V 0805

2435	4822 124 41584	100uF 20% 10V
2436	3198 017 42230	22nF 20% Y5V 50V
2437	4822 122 33741	10pF 5% NP0 50V
2438	4822 122 33741	10pF 5% NP0 50V
2439	4822 122 33741	10pF 5% NP0 50V

2440	4822 122 31765	100pF 5% NP0 63V
2441	5322 126 11578	1nF 10% X7R 50V
2442	4822 126 13881	470pF 5% 50V
2443	4822 126 13881	470pF 5% 50V

RESISTORS

3400	4822 051 30101	100R 5% 0,062W
3401	4822 051 30471	470R 5% 0,062W
3402	4822 051 30102	1K 5% 0,062W
3403	4822 117 13632	100K 1% 0.62W
3404	4822 051 30221	220R 5% 0,062W

3405	4822 051 30223	22K 5% 0,062W
3406	4822 051 30223	22K 5% 0,062W
3407	4822 051 30223	22K 5% 0,062W
3408	4822 051 30223	22K 5% 0,062W
3409	4822 051 30223	22K 5% 0,062W

3411	4822 051 30103	10K 5% 0,062W
3412	4822 051 30334	330K 5% 0,062W
3413	4822 051 30681	680R 5% 0,062W
3414	4822 051 30472	4,7K 5% 0,062W
3415	4822 051 30121	120R 5% 0,062W

3416	4822 117 12971	15R 5% MCR03 0,62W
3417	4822 051 30223	22K 5% 0,062W
3418	4822 051 30472	4,7K 5% 0,062W
3420	4822 051 30392	3,9K 5% 0,062W
3421	4822 051 30153	15K 5% 0,062W

3422	4822 117 13632	100K 1% 0.62W
3423	4822 051 30392	3,9K 5% 0,062W
3424	4822 051 30102	1K 5% 0,062W
3425	4822 051 30102	1K 5% 0,062W
3426	4822 051 30392	3,9K 5% 0,062W

3427	4822 051 30102	1K 5% 0,062W
3428	4822 051 30332	3,3K 5% 0,062W
3429	4822 051 30102	1K 5% 0,062W
3430	4822 051 30102	1K 5% 0,062W
3431	4822 051 30471	470R 5% 0,062W

3432	4822 051 30472	4,7K 5% 0,062W
3433	4822 051 30472	4,7K 5% 0,062W
3435	4822 051 30223	22K 5% 0,062W
3436	4822 051 30223	22K 5% 0,062W
3437	4822 051 30223	22K 5% 0,062W

3438	4822 051 30223	22K 5% 0,062W
3439	4822 051 30223	22K 5% 0,062W
3440	4822 051 30102	1K 5% 0,062W
3441	4822 051 30472	4,7K 5% 0,062W
3442	4822 051 30472	4,7K 5% 0,062W

3443	4822 051 30472	4,7K 5% 0,062W
3444	4822 051 30102	1K 5% 0,062W
3445	4822 051 30101	100R 5% 0,062W
3446	4822 051 30102	1K 5% 0,062W
3447	4822 051 30223	22K 5% 0,062W

3448	4822 051 30223	22K 5% 0,062W
3449	4822 051 30222	2,2K 5% 0,062W
3450	4822 051 30102	1K 5% 0,062W
3451	4822 051 30222	2,2K 5% 0,062W
3455	4822 051 30101	100R 5% 0,062W

ELECTRICAL PARTSLIST - CONTROL BOARD**MISCELLANEOUS**

1402	4822 267 10756	FFC SOCKET 13P
1405	4822 265 11183	FFC SOCKET 4P
1406	4822 267 10956	FFC SOCKET 7P
1407	4822 265 11207	FFC SOCKET 6P
7400	9322 155 82667	IR RECEIVER TSOP2236
7401	3140 110 50730	LCD WK-TP5238-RH-B
8402	3139 110 36050	FFC FOIL 4P 80MM AD

CAPACITORS

2400	2020 552 96305	4,7uF +80-20% Y5V 10V
2401	4822 126 13883	220pF 5% 50V
2402	3198 016 31020	1nF 10% NP0 25V
2403	4822 126 13881	470pF 5% 50V
2405	4822 124 40433	47uF 20% 25V
2406	4822 122 31765	100pF 5% NP0 63V
2407	4822 122 31765	100pF 2% NP0 63V
2408	4822 122 31765	100pF 5% NP0 63V
2412	4822 122 31765	100pF 5% NP0 63V
2413	3198 017 41050	1uF 20% Y5V 10V
2414	4822 122 31765	100pF 5% NP0 63V
2415	4822 122 31765	100pF 5% NP0 63V
2416	5322 126 11583	10nF 10% X7R 50V
2417	4822 122 33752	15pF 5% NP0 50V
2418	4822 122 33752	15pF 5% NP0 50V
2419	4822 122 31765	100pF 5% NP0 63V
2420	4822 122 31765	100pF 5% NP0 63V
2421	4822 122 31765	100pF 5% NP0 63V
2422	4822 126 14305	100nF 10% X7R 16V
2423	4822 124 41584	100uF 20% 10V
2424	4822 122 33741	10pF 5% NP0 50V
2425	4822 122 33741	10pF 5% NP0 50V
2426	5322 126 11583	10nF 10% X7R 50V
2427	5322 126 11583	10nF 10% X7R 50V
2428	5322 126 11583	10nF 10% X7R 50V
2429	4822 122 31765	100pF 5% NP0 63V
2430	4822 122 31765	100pF 5% NP0 63V
2431	4822 122 31765	100pF 5% NP0 63V
2432	4822 122 31765	100pF 5% NP0 63V
2434	4822 126 14491	2.2uF 10V 0805
2435	4822 124 41584	100uF 20% 10V
2436	3198 017 42230	22nF 20% Y5V 50V
2437	4822 122 33741	10pF 5% NP0 50V
2438	4822 122 33741	10pF 5% NP0 50V
2439	4822 122 33741	10pF 5% NP0 50V
2440	4822 122 31765	100pF 5% NP0 63V
2441	5322 126 11578	1nF 10% X7R 50V
2442	4822 126 13881	470pF 5% 50V
2443	4822 126 13881	470pF 5% 50V

RESISTORS

3400	4822 051 30101	100R 5% 0,062W
3401	4822 051 30471	470R 5% 0,062W
3402	4822 051 30102	1K 5% 0,062W
3403	4822 117 13632	100K 1% 0.62W
3404	4822 051 30221	220R 5% 0,062W
3405	4822 051 30223	22K 5% 0,062W
3406	4822 051 30223	22K 5% 0,062W
3407	4822 051 30223	22K 5% 0,062W
3408	4822 051 30223	22K 5% 0,062W
3409	4822 051 30223	22K 5% 0,062W
3411	4822 051 30103	10K 5% 0,062W
3412	4822 051 30334	330K 5% 0,062W
3413	4822 051 30681	680R 5% 0,062W
3414	4822 051 30472	4,7K 5% 0,062W
3415	4822 051 30121	120R 5% 0,062W
3416	4822 117 12971	15R 5% MCR03 0,62W
3417	4822 051 30223	22K 5% 0,062W
3418	4822 051 30472	4,7K 5% 0,062W
3420	4822 051 30392	3,9K 5% 0,062W
3421	4822 051 30153	15K 5% 0,062W
3422	4822 117 13632	100K 1% 0.62W
3423	4822 051 30392	3,9K 5% 0,062W
3424	4822 051 30102	1K 5% 0,062W
3425	4822 051 30102	1K 5% 0,062W
3426	4822 051 30392	3,9K 5% 0,062W
3427	4822 051 30102	1K 5% 0,062W
3428	4822 051 30332	3,3K 5% 0,062W
3429	4822 051 30102	1K 5% 0,062W
3430	4822 051 30102	1K 5% 0,062W
3431	4822 051 30471	470R 5% 0,062W
3432	4822 051 30472	4,7K 5% 0,062W
3433	4822 051 30472	4,7K 5% 0,062W
3435	4822 051 30223	22K 5% 0,062W
3436	4822 051 30223	22K 5% 0,062W
3437	4822 051 30223	22K 5% 0,062W
3438	4822 051 30223	22K 5% 0,062W
3439	4822 051 30223	22K 5% 0,062W
3440	4822 051 30102	1K 5% 0,062W
3441	4822 051 30472	4,7K 5% 0,062W
3442	4822 051 30472	4,7K 5% 0,062W
3443	4822 051 30472	4,7K 5% 0,062W
3444	4822 051 30102	1K 5% 0,062W
3445	4822 051 30101	100R 5% 0,062W
3446	4822 051 30102	1K 5% 0,062W
3447	4822 051 30223	22K 5% 0,062W
3448	4822 051 30223	22K 5% 0,062W
3449	4822 051 30222	2,2K 5% 0,062W
3450	4822 051 30102	1K 5% 0,062W
3451	4822 051 30222	2,2K 5% 0,062W
3455	4822 051 30101	100R 5% 0,062W

ELECTRICAL PARTSLIST - CONTROL BOARD**RESISTORS**

3456	4822 051 30103	10K 5% 0,062W
3457	4822 051 30103	10K 5% 0,062W
3458	4822 051 30222	2,2K 5% 0,062W
3459	4822 051 30562	5,6K 5% 0,062W
3463	4822 051 30222	2,2K 5% 0,062W
3464	4822 051 30562	5,6K 5% 0,062W
3465	4822 051 30102	1K 5% 0,062W
3466	4822 051 30472	4,7K 5% 0,062W
3467	4822 051 30223	22K 5% 0,062W
3468	4822 051 30223	22K 5% 0,062W
3469	4822 051 30223	22K 5% 0,062W
3470	4822 051 30102	1K 5% 0,062W
3471	4822 051 30102	1K 5% 0,062W
3472	4822 117 12925	47K 1% 0,062W
3473	4822 117 12925	47K 1% 0,062W
3474	4822 051 30471	470R 5% 0,062W
3475	4822 051 30471	470R 5% 0,062W
3476	4822 051 30008	0R Jumper 0603
3477	4822 051 30471	470R 5% 0,062W
3478	4822 051 30222	2,2K 5% 0,062W
3479	4822 051 30222	2,2K 5% 0,062W
3480	4822 051 30471	470R 5% 0,062W
3481	4822 051 30101	100R 5% 0,062W
3482	4822 117 12903	1,8K 1% 0,062W
3483	4822 051 30561	560R 5% 0,062W
3485	4822 051 30472	4,7K 5% 0,062W
3486	4822 051 30223	22K 5% 0,062W
4401	4822 051 30008	0R Jumper 0603
4402	4822 051 30008	0R Jumper 0603
4403	4822 051 30008	0R Jumper 0603
4404	4822 051 30008	0R Jumper 0603
4405	4822 051 30008	0R Jumper 0603
4406	4822 051 30008	0R Jumper 0603
4407	4822 051 30008	0R Jumper 0603
4408	4822 051 30008	0R Jumper 0603
4409	4822 051 30008	0R Jumper 0603
4410	4822 051 30008	0R Jumper 0603
4411	4822 051 30008	0R Jumper 0603
4412	4822 051 30008	0R Jumper 0603
4413	4822 051 30008	0R Jumper 0603
4414	4822 051 30008	0R Jumper 0603
4415	4822 051 30008	0R Jumper 0603
4416	4822 051 30008	0R Jumper 0603
4417	4822 051 30008	0R Jumper 0603
4418	4822 051 30008	0R Jumper 0603
4419	4822 051 30008	0R Jumper 0603
VR201	9965 000 10902	Rotary VR 50KbX2

COILS & FILTERS

1404	2422 540 98455	RES CER 4,194MHz
5400	4822 157 62552	2,2uH
5401	4822 157 62552	2,2uH
5402	2422 535 94279	100uH 5%

DIODES

6400	9322 025 78682	LED TLUR5400
6401	4822 130 11564	UDZ3.9B
6402	4822 130 10838	UDZ3.3B
6403	5322 130 34337	BAV99

TRANSISTORS AND IC

7402	5322 130 42755	BC847C
7403	5322 130 42755	BC847C
7404	4822 130 60511	BC847B
7405	3140 110 51420	TMP86CH21F
7406	9965 000 04931	M24C01-WMN6
7407	4822 130 60511	BC847B

ELECTRICAL PARTSLIST - KEYBOARD**MISCELLANEOUS**

1408	2422 128 02917	SWITCH-TACT
1409	2422 128 02917	SWITCH-TACT
1410	2422 128 02917	SWITCH-TACT
1411	2422 128 02917	SWITCH-TACT
1412	2422 128 02917	SWITCH-TACT
1414	2422 128 02917	SWITCH-TACT
1415	2422 128 02917	SWITCH-TACT
1416	2422 128 02917	SWITCH-TACT
1417	2422 128 02917	SWITCH-TACT
1418	2422 128 02917	SWITCH-TACT

RESISTORS

3487	4822 051 30222	2,2K 5% 0,062W
3488	4822 051 30152	1,5K 5% 0,062W
3489	4822 051 30102	1K 5% 0,062W
3490	4822 051 30471	470R 5% 0,062W
3491	4822 051 30222	2,2K 5% 0,062W
3492	4822 051 30152	1,5K 5% 0,062W
3493	4822 051 30102	1K 5% 0,062W
3494	4822 051 30471	470R 5% 0,062W

Note: Only these parts mentioned in the list are normal service parts.

Service
Service
Service

Product Service Group CE Audio

Service Information

Already published Service Informations: A01-553 3140 785 22790

From week 0135 onwards, the Control Board and the Keyboard are replaced because a new Microprocessor IC (7405) is used.

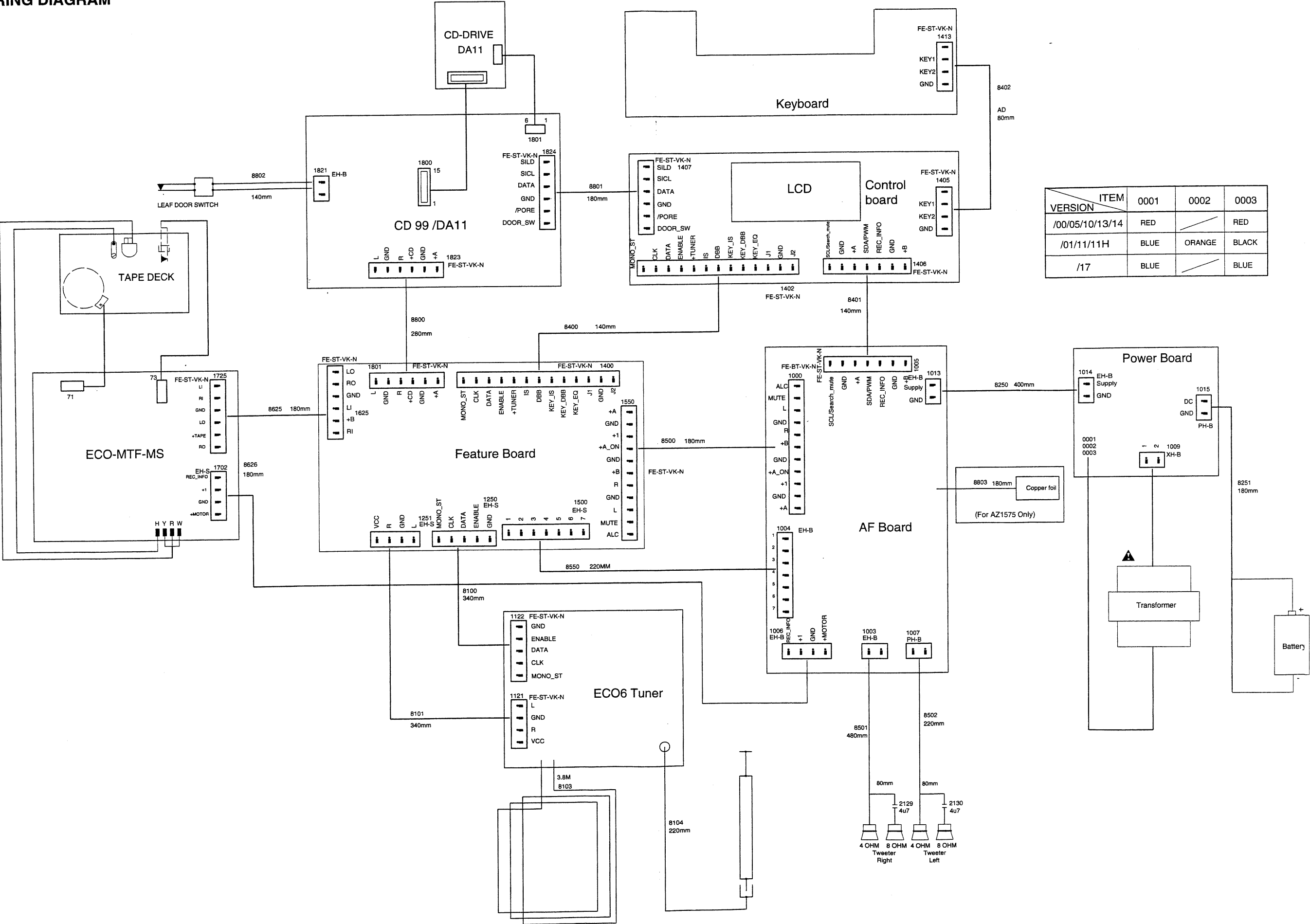
For servicing, please refer to the attached pages.

Wiring Diagram.....	6 - 2
Control board - circuit & layout diagram.....	9 - 3 ..9 - 4
Keyboard - circuit & layout diagram	12 - 2
Electrical partslist	16 - 7..16 - 8

Note :

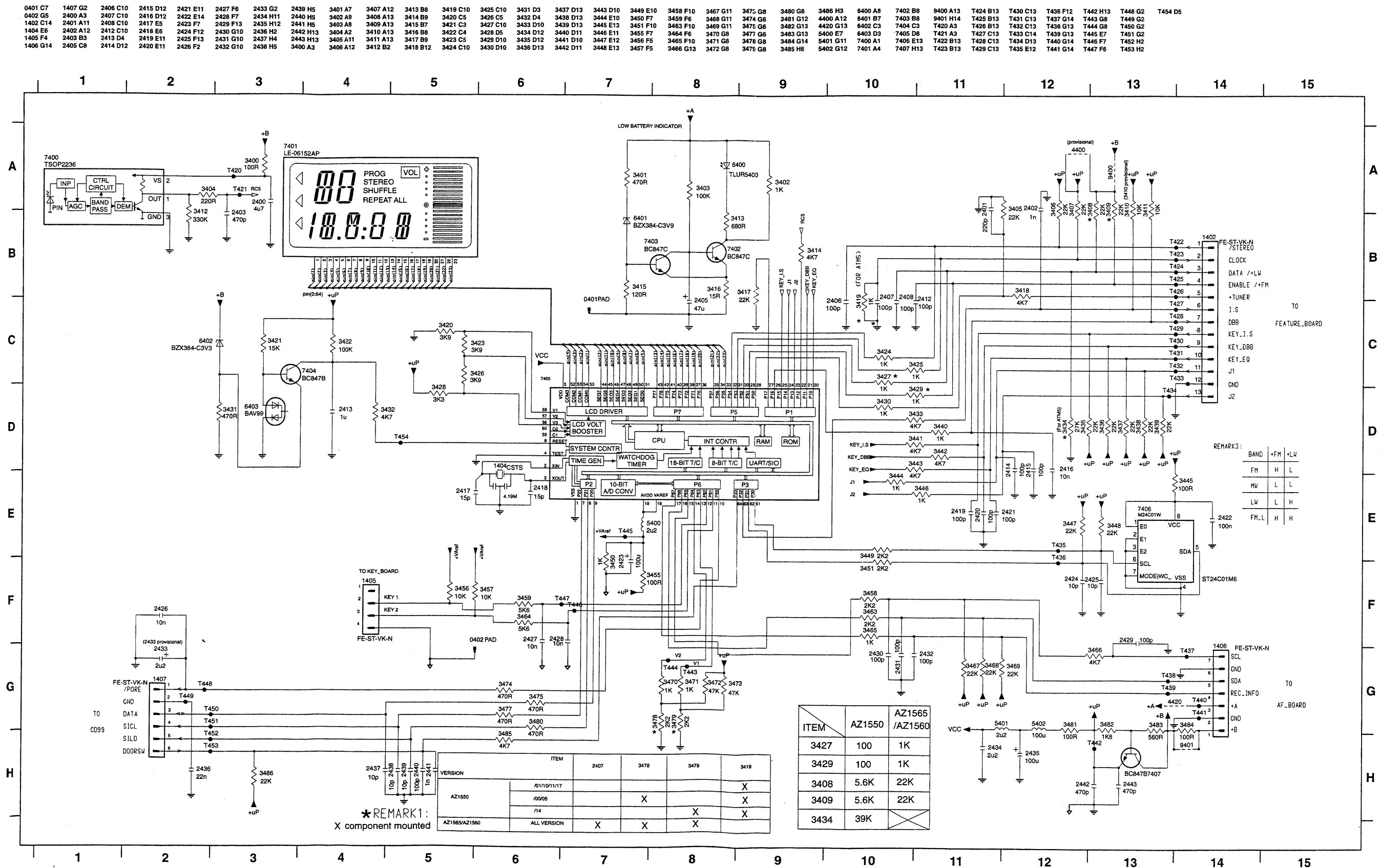
Code number of new boards : 3140 113 3255x Key board
3140 113 3256x Control board

WIRING DIAGRAM

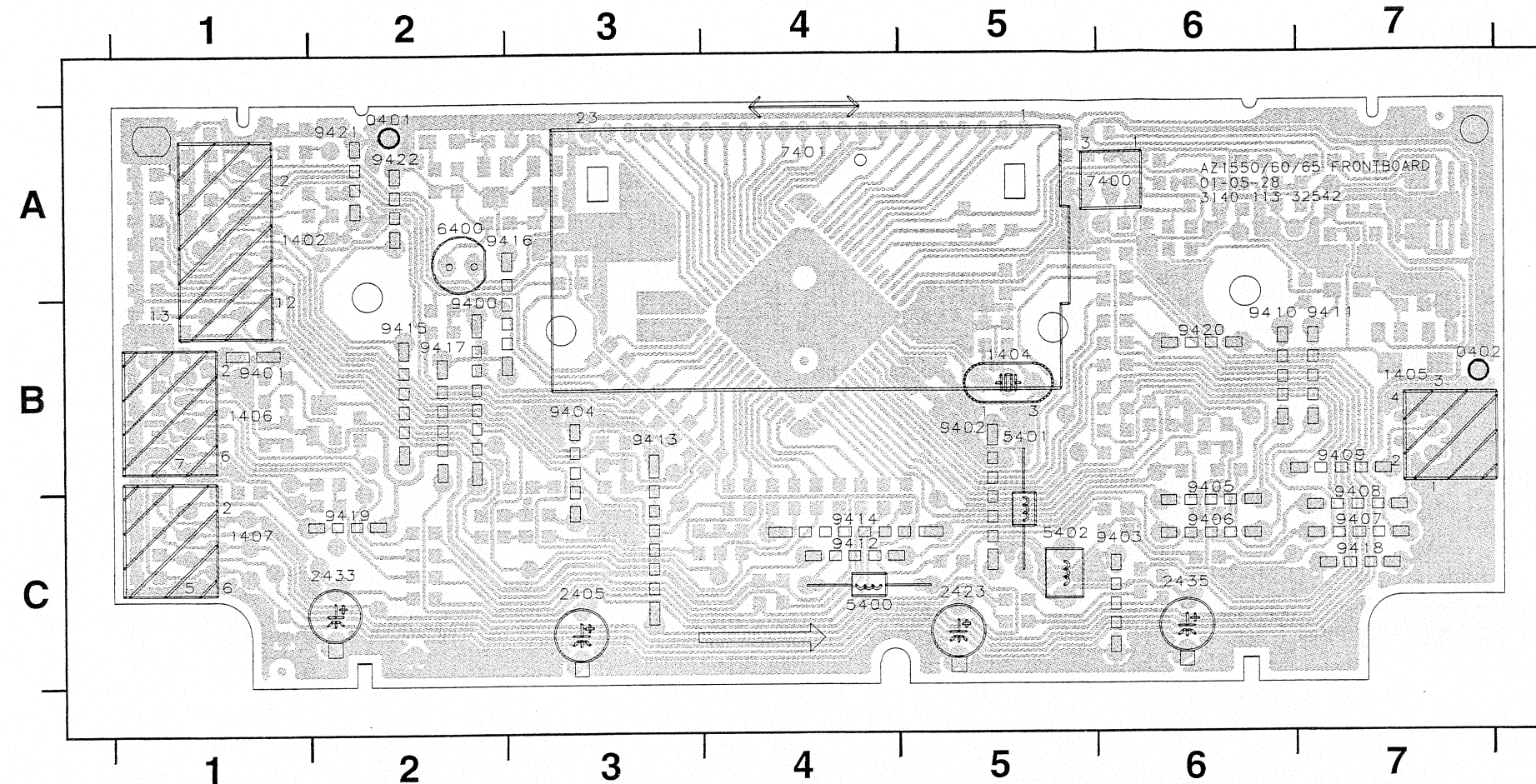


ITEM	0001	0002	0003
VERSION			
/00/05/10/13/14	RED		RED
/01/11/11H	BLUE	ORANGE	BLACK
/17	BLUE		BLUE

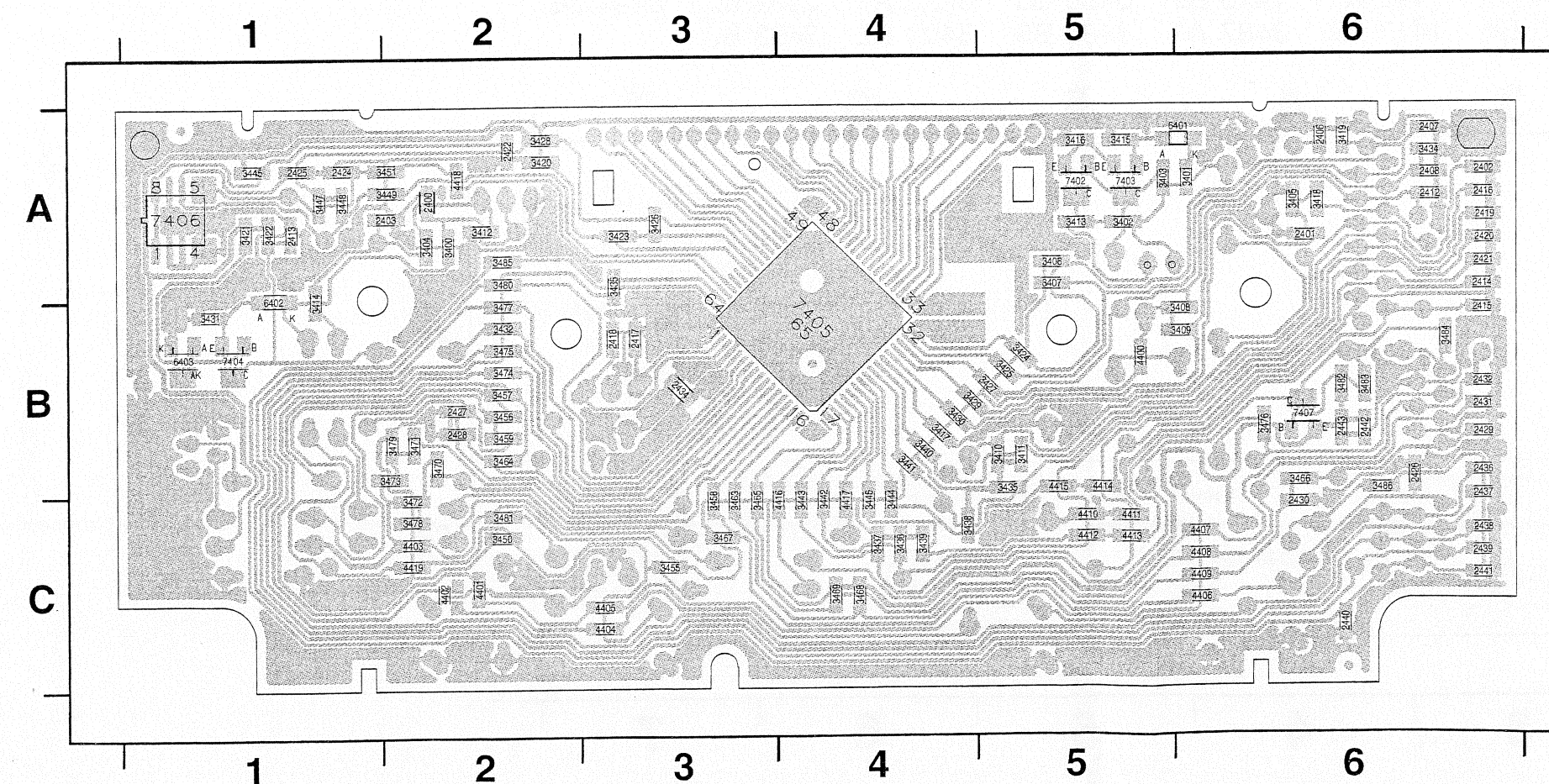
CONTROL BOARD - CIRCUIT DIAGRAM



CONTROL BOARD - LAYOUT DIAGRAM



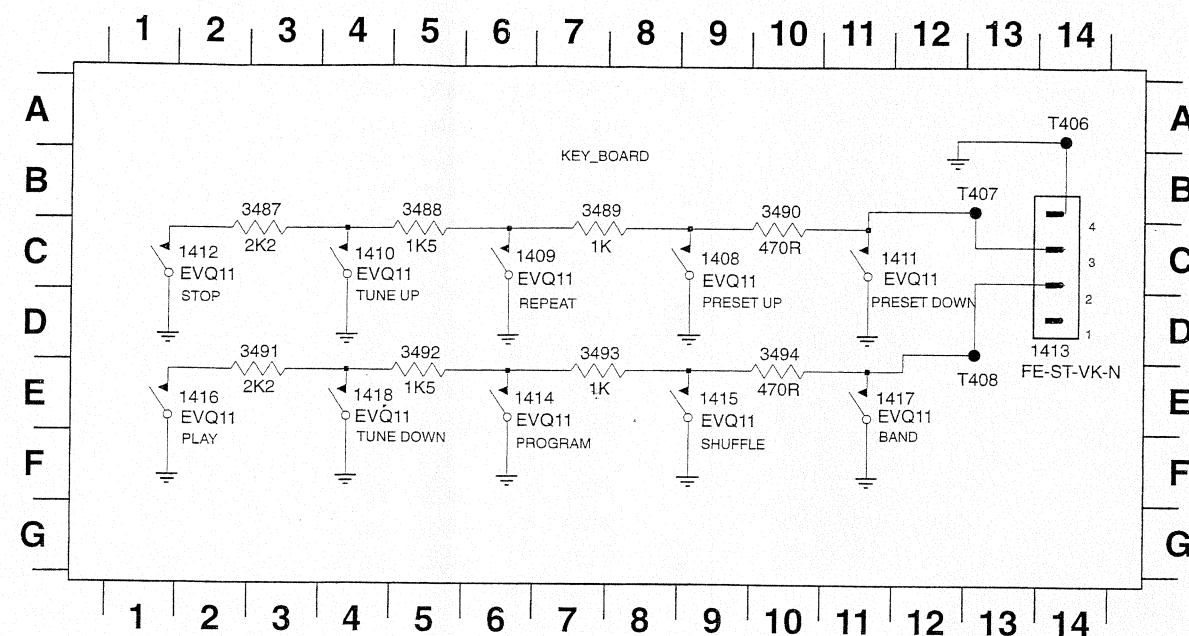
401	A2	9405	B6
402	B7	9406	C6
1402	A1	9407	C7
1404	B5	9408	C7
1405	B7	9409	B7
1406	B1	9410	B6
1407	C1	9411	B7
2405	C3	9412	C4
2423	C5	9413	B3
2433	C2	9414	C4
2435	C6	9415	B2
5400	C4	9416	A3
5401	B5	9417	B2
6400	A2	9418	C7
7400	A6	9419	C2
7401	A4	9420	B6
9400	B2	9421	A2
9401	B1	9422	A2
9402	B5		
9403	C6		
9404	B3		



2400	A2	2431	B6	3414	A1	3439	C4	3470	B2	4408	C6
2401	A6	2432	B6	3415	A5	3440	B4	3471	B2	4409	C6
2402	A6	2434	B3	3416	A5	3441	B4	3472	C2	4410	C5
2403	A2	2436	B6	3417	B4	3442	C4	3473	B2	4411	C5
2406	A6	2437	C6	3418	A6	3443	C4	3474	B2	4412	C5
2407	A6	2438	C6	3419	A6	3444	C4	3475	B2	4413	C5
2408	A6	2439	C6	3420	A2	3445	A1	3476	B6	4414	B5
2412	A6	2440	C6	3421	A1	3446	C4	3477	B2	4415	B5
2413	A1	2441	C6	3422	A1	3447	A1	3478	C2	4416	C4
2414	A6	2442	B6	3423	A3	3448	A1	3479	B2	4417	C4
2415	B6	2443	B6	3424	B5	3449	A2	3480	A2	4418	A2
2416	A6	3400	A2	3425	B5	3450	C2	3481	C2	4419	C2
2417	B3	3401	A6	3426	A3	3451	A2	3482	B6	6401	A6
2418	B3	3402	A5	3427	B5	3455	C3	3483	B6	6402	A1
2419	A6	3403	A5	3428	A2	3456	B2	3484	B6	6403	B1
2420	A6	3404	A2	3429	B4	3457	B2	3485	A2	7402	A5
2421	A6	3405	A6	3430	B4	3458	C3	3486	B6	7403	A5
2422	A2	3406	A5	3431	B1	3459	B2	4400	B5	7404	B1
2424	A1	3407	A5	3432	B2	3463	C3	4401	C2	7405	B4
2425	A1	3408	B6	3433	A3	3464	B2	4402	C2	7406	A1
2426	B6	3409	B6	3434	A6	3465	C3	4403	C2	7407	B6
2427	B2	3410	B5	3435	B5	3466	B6	4404	C3		
2428	B2	3411	B5	3436	C4	3467	C3	4405	C3		
2429	B6	3412	A2	3437	C4	3468	C4	4406	C6		
2430	C6	3413	A5	3438	C4	3469	C4	4407	C6		

KEYBOARD - CIRCUIT & LAYOUT DIAGRAM

1408 C9	1411 C11	1414 E6	1417 E11	3488 C5	3491 E3	3494 E10	T408 D13
1409 C6	1412 C1	1415 E9	1418 E4	3489 C7	3492 E5	T406 A14	
1410 C4	1413 C14	1416 E1	3487 C3	3490 C10	3493 E7	T407 B13	



1408 A7	1410 B6	1412 A1	1414 A1	1416 A1	1418 B2	3488 B5	3490 A7	3492 B2	3494 B6
1409 B4	1411 A7	1413 B7	1415 B4	1417 A7	3487 A1	3489 B5	3491 B2	3493 B3	

